

AGENDA TOWN OF SUPERIOR PLANNING COMMISSION MEETING TUESDAY, OCTOBER 16, 2012 7:00 p.m.

- 1) Call to Order
- 2) Roll Call
- 3) Public Comment on Consent Agenda and Non-Agenda Items (5 minutes per person)
- 4) Consent Agenda
 - a) Approval of the September 18, 2012 minutes
- A motion recommending to the Board of Trustees approval of an Ordinance repealing Sections 16-26-40, 16-26-60, 16-26-70, 16-26-80, 16-26-90 and 16-26-100 of the Superior Municipal Code, and Repealing and Reenacting Article III of Chapter 11, all relating to Stormwater Quality
- 6) Discussion regarding Chapter 18, Article VI of the Superior Municipal Code and adopting a new Chapter 15, relating to Flood Regulations
- 7) Staff Announcements/ Miscellaneous
- 8) Adjournment

TOWN OF SUPERIOR PLANNING COMMISSION

MINUTES OF SEPTEMBER 18, 2012

The Planning Commission for the Town of Superior met in a regular meeting on September 18, 2012 at the Town Hall, 124 E. Coal Creek Drive, Superior, Colorado.

CALL MEETING TO ORDER

Chairperson Folsom called the meeting to order at 7:00 p.m. and asked for the reading of the roll.

CALLING OF THE ROLL

Present: Chairperson Clint Folsom, Vice Chairperson Kraig Prestesater (came later), Commissioners Rozita Abdul-Williams, Joanne Eaton (came later), Phyllis Hardin, Bob McCool, Robert Mommaerts; Town Planner Fred Fox and Assistant Town Manager Beth Moyski. Absent: Commissioners Rochelle Rittmaster and Tom Ricker.

CONSENT AGENDA

The minutes of September 4, 2012 were discussed. Chairperson Folsom said on Page 11 there was a comment by Commissioner Rittmaster which said "it doesn't bring an interesting diversity". He believes that it should say it "does". Commissioner Eaton moved to approve the minutes of September 4, 2012 with that correction. Seconded by Commissioner McCool. Ayes – 7 (Abdul-Williams, Eaton, Folsom, Hardin, McCool, Mommaerts, Prestesater). Absent – 2 (Rittmaster, Ricker). Motion carried.

PUBLIC HEARING AND APPROVAL OF A RESOLUTION RECOMMENDING THE BOARD OF TRUSTEES APPROVE THE 2012 COMPREHENSIVE PLAN UPDATE IN CASE # CPU-2012-1

Chairperson Folsom opened the public hearing. For the record, proof of publication was submitted. Town Planner Fred Fox gave a presentation. The Commissioners received a copy in their packet and a staff report summarizing the changes including the summary by the consultants, Clarion and Associates. Darcie White gave a presentation of the process they did during the year. A summary of her comments are as follows:

- Clarion and Associates were tasked with updating the Comprehensive Plan in April of 2012 and getting feedback on the current plan. This was to update the plan to reflect current trends and existing conditions.
- One of the key objectives of this process was to confirm the Town's visions and goals and make updates as needed to reflect the changes in the community.
- The final thing that was the core part of this process was to look at the undeveloped land within the Town to determine what future uses might be suitable on those properties.

- Since April there were monthly meetings with the Planning Commission and the Town Board.
- There were four community meetings as well as an online survey available to solicit additional feedback from the community. There were about 100 people who participated either through online surveys or various public workshops.
- The key issues they were asked to focus on was to look at properties and future issues for existing properties in the Town that are currently undeveloped and to make sure the plan addresses the different needs of different areas of the community.
- There are specific polices of Original Superior and for the Town Center. General policies are applied throughout the community, as well as specific recommendation for each of the opportunity sites.
- The other piece was the Economic and Planning Systems Consultant. Matt Prosser helped throughout the process providing an economic feasibility analysis. It can be used to evaluate different opportunities as the Town goes forward.
- Alex Ariniello and Lisa Richie have been helping with the transportation plan and the elements of that plan to accompany the Comprehensive Plan.
- Chris Dropinski, Greenplay, focus was on the Parks and Open Space section of the plan.
- One of the key changes structurally in the plan was that the organization of the plan has been adjusted. There are now separate policy sections for each of the different topics. Chapters 4 10, address each of the specific elements of the plan that are required by State Statues. This is a slight change from the current plan.
- · Also, a more detailed appendix with the updated trends and existing conditions information was added.
- Chapter 3 Vision Section. It was asked early in the process for community input on the current plan and its visions and goals and what was heard was that the vision was still sound and still makes since to the citizens of Superior.
- Chapter 4 Land Use Chapter. This was where the most significant changes to the plan were made. The policy and the goals have been broken out to address specific needs in the community. There have also been targeted updates to the policy. One of the new features in this draft plan is a land use table, which includes definitions for the major land use categories. In addition to defining the different characteristics in each of the uses there is also typically density ranges and primary and secondary uses and the related zone districts. The Community Framework and Land Use Plan Maps were updated.
- Opportunity Area 1 76th Street properties. Each section or opportunity area will show two things, preferred land uses and some design considerations that should be considered as projects come forward. For this site in particular, the land use plan calls for this to be light industrial or flex space. It also recognizes that community use being appropriate in this location.
- Opportunity Area 2 Rogers Property. This shows the preferred use as a mix of medium density and office use. This also shows that community uses may be appropriate in this location. On the map there are some asterisks next to some of the sites and the reason for that was to capture public sentiment regarding the

- desire for public community uses in the future and the need to be flexible for where those might go.
- Opportunity Area 3 the Town Center. There are number of specific policies for this area and that process has just began to wind down. One of the things that was done as part of this is was to break out the south portion of the Town Center site from the Town Center Core. The reason was based on public input that there was a need to ask for public input on not just the north part of the Town Center but the area to the south which hasn't been addressed. Midway through the process the south portion was pulled out and feedback was asked for. Generally, what is being recommended is a mix of uses that would complement the work that has been done on the Town Center.
- The Anderson Property Along the US 36 corridor. This is one of several locations where the plan recommends a mix of residential housing types. This was heard a lot throughout the discussions. The need to think forward about the population, not just those that live here today but future residents and a desire for more housing types to accommodate the aging population in Superior. Senior housing, attached patio homes, etc. to broaden the Town's housing options beyond single family detached units.
- The Zaharias Property Southeast of the Anderson property. This property has a similar recommendation for a mix of housing types. In both locations, the key consideration in the plan is making sure that future uses are compatible with the neighborhood to the south.
- The Richmond Property Southwest along McCaslin Blvd. The preferred use in this location was identified as moderate intensity residential. This is a shift from the current plan that calls for commercial use in this location. The reason being that when the Rock Creek development was originally platted it was intended to be another half to that development to the west.
- Calmante Property. The recommendation for this site is to also look at townhomes and senior housing. In this case there is a partially built development to the east that the plan recommends that something similar to that scale would be built out on the adjacent lots. This is another area where community oriented uses were thought could be a consideration.
- Resolute Investment property. The recommendation for commercial or retail has not changed from the current plan, and this remains one of the Town's retail opportunity sites, one of the few that remain.
- The Opportunity Area 10 Ridge 2. The recommendation is to carry forward the
 office designation that is currently entitled for this property. The entitlements will
 expire in the next year or two and the recommendation is to consider other uses
 when this expires. There was definitely interest in the community to look at this
 site for open space use.
- Opportunity Area 11 the former school property. In the current plan this site is identified as community reserve, which is not clearly defined in the plan. The zoning for this property is for Open Space. From feedback from the community, there is a strong interest in pursuing a potential park or other civic use in this area.

Opportunity Area 12 – Level 3. This is another site that has not changed in its designation. This is a large piece of property, most of which is undevelopable. The current plan calls about 2/3 of that site to remain as open space. The developable portion would remain as office in the future.

Mr. Fox asked the Commissioners to come up with a consensus of something that might need to be changed or focus on any of these chapters. It needs to be articulated so that staff can make a list and ultimately they would be recommendations or modifications that would be given to the Board.

Commissioner Mommaerts said in the first paragraph of Chapter 4 under back ground, it talks about 360 acres of vacant land that remains which is less than ¼ of the Town's available total acreage. He thought if the notion was to show how scarce it is and if it is meant to look more prime from a marketing stand point, then that fraction is one-seventh or one-eighth which would convey more rarity.

Chairperson Folsom commented on policy 4.5.c about existing block patterns and describes the notion that any development in Original Superior should extend the existing grid pattern into new developing areas. He doesn't think that was changed from the previous version, however, it's contrary to what is happening in the Remington Development where there was a lot of discussion both ways. He wonders if the block should be extended or not and ultimately it was settled on not. He is wondering if this should be changed or left as is. He just wanted to acknowledge the policy wasn't consistent with the most recent development and more than likely wouldn't be consistent with another one should it come along.

Commissioner McCool stated that he feels it would spark considerable conversation for the Planning Commission and the fact a plan went through that was against the Comprehensive Plan. This was discussed pretty heavily and those who live in that area and know what the residents spoke to many years ago felt like the grid was very important but there was considerable public comment about not wanting those to go through. From a Comprehensive Plan stand point, trying to change this at the end would be inappropriate without involving the community that set it in the first place. The grid works nicely and those who were in favor of the grid would probably appreciate a lot of conversation before that got changed. It was just never addressed in the entire Comprehensive Plan Update.

Commissioner McCool asked in relation to open space and natural open space that was mentioned in Ridge 2 of possible open space consideration when the entitlements expire. There is at least one other property in the opportunity areas that is an open space priority but there is no mention of that in the Comprehensive Plan and wondered if that was handled or discussed. Ms. White asked if he was referring to the Zaharias Property and was told yes.

Martin Toth, Town Staff, did notice that distinction and that was added to the draft. Commissioner McCool also said that in the Natural Open Space area there is no mention of the parcels that are outstanding and being considered for Open Space. He is not sure if it's appropriate to include them in the Comprehensive Plan but they are missing from the Natural

Open Space area of the Comprehensive Plan. Ms. White says her understanding is that these are addressed in the PROS (Parks, Recreation and Open Space) Master Plan and so they carried forward the spirit of that. Commissioner McCool said there is a separate open space plan that is separate from the PROS plan and feels it's something that should be referenced in these documents. Ms. White did point out the open space portion of the Zaharias property.

Matt Prosser, Economic & Planning System Consultants, gave a presentation and a summary of his comments are as follows:

- His role in this process was to look at the market demands for various uses within the Town over the planning horizon of the Comprehensive Plan which is 25 years. The second aspect was to analysis the fiscal impact of the future land use plan on the Town to insure that any future development doesn't create a fiscal burden for the Town.
- A summary of the market demand findings and fiscal impact findings is provided in the appendix of the Comprehensive Plan. The market demand study served as input for the land use designation where provided.
- Some of the findings were a strong demand for residential uses over the next 25 years in the Louisville, Lafayette and Superior area for a total of 5,000 units, which is consistent with past development trends.
- Retail demand was limited due to large amount of vacancy that exists along the US36 corridor. The Town had opportunities to attract some specialty retail and a limited number of mass merchandisers, primarily in either the Superior Market Place or the future Town Center project. There is also a demand for restaurant users. This likely won't be attracted unless an amenity like the Town Center is developed to attract those users.
- Office demand is expected to be limited and will likely be locally oriented. The Town Center does provide the opportunity to potentially attract a major user or a more diverse set of jobs or office users to the Town.
- The policy that was put into the Comprehensive Plan for the economy was to focus on the Town Center development as a way to both attract additional retail users as well as a diversity of office users.
- A policy held over from the previous update was the diversity in employment opportunities. This is something that can be addressed through the Town Center development.
- Lastly, there would be a plan for a balanced land use plan that creates a fiscally strong community. They analyzed the land use designation proposed and found that this would provide a fiscal benefit to the Town and would not create a burden.
- A fiscal model was created for Staff's use for any developments that would come
 into Town. He recommends that the model be used specifically for projects that
 vary greatly from the proposed land uses within the plan or where the Town is
 considering using economic development.

Ms. White said a new section of the plan relates to Community Engagement. There were some policies in the plan as it exists today that have been relocated. They have tried to

highlight the efforts the Town already made and to insure that those continue going forward. Also, the Community Facilities and Services section has been worked out with Town Staff to make some editorial updates to reflect current service providers and adjust those pieces accordingly. There are only minor changes in this section.

Alex Ariniello, Public Works Superintendent, gave a presentation about transportation and his comments are as follows

- He along with Lisa Richie, Town Staff, worked on updating the transportation section.
- There is a lot of other information that went into providing the frame work and basis in this plan. They intend to develop a second document called "Transportation Plan" that has a lot of information on traffic volumes.
- The policies were updated from the last plan. The major changes are on polices 8.1.d and 8.1.h.
- On 8.1.m, the McCaslin/US36 Interchange reflects the changes of the Diverging Diamond Interchange design.
- On 8.1.n shows the change on the McCaslin Blvd traffic flows. They tried to develop a vision plan for McCaslin Blvd. It really hasn't changed much since Boulder County built the road 25-30 years ago and it hasn't fit into the future of Superior. It needs to interface with the upcoming developments. The vision for that corridor takes advantage of the wide right-of-way and the Town Board desires to see some traffic calming features such as wide medians and roundabouts.
- · Mr. Ariniello showed some graphics of the McCaslin Blvd Corridor Concept Plan
- Included in this plan is also write ups on the McCaslin/US 36 interchange and the US36 managed lanes to reflect the planning work that has been going on the last three or four years.
- There is a bike trails map. He has been working with Parks and Open Space on their trails and planned trails. The US36 bikeway concept was shown as well.

Commissioner McCool asked if a road is posted at 40 mph why it's not designed for 40 as opposed to being designed for 45 and where people are still doing 50. Mr. Ariniello stated that because of slippery pavement and things of that nature there needs to be a factor of safety provided. On local streets, where the traffic needs to go very slow, the design speed needs to be close to the posted speed.

Commissioner McCool commented about the concept of traffic and how the roads handle traffic but it isn't talked about how people handle the change in traffic. In many parts of the Comprehensive Plan the quality of life is talked about and view corridors. But when it comes to traffic it isn't talked about as a community and how to deal with that. To not do that is one of the most challenging areas that everyone gets frustrated with but it is not addressed. Mr. Ariniello responded by saying that there are a number of polices that talk about multi-modal. There is no plan for expanding McCaslin Blvd. We don't want a high

speed roadway. Commissioner McCool talked about the impact the Town Center will have and the concerns that go along with that.

Chairperson Folsom asked about the section for Alternative Modes of Transportation. He said there is no mention of the golf carts and there have been various meetings where the future use of golf carts in Town has come up. If it will be allowed in the future, he would like to see it mentioned in the Comprehensive Plan. Mr. Ariniello said he was involved in drafting an electric vehicle ordinance and he doesn't think that it ever went anywhere. There was discussion about electric vehicles and a possible ordinance.

Commissioner Eaton asked if it's possible to put together a policy that would say this could be considered – all modes of transportation. Mr. Fox said he thinks if it was suggested that it could be added to 8.1.a.

Commissioner Mommaerts asked about the underpass that was approved at the last meeting. He asked if the use of electric vehicles would affect the dimensions of the tunnel. Mr. Ariniello stated that the underpass is 18-20 feet, it's pretty wide.

Chris Dropinski, Greenplay, gave a presentation on the Parks, Recreation and Open Space. Her comments are as follows:

- She looked to incorporate relevant elements of the 2005 Master Plan that was done
 for the Town. She looked at what has been accomplished or changed since that
 time.
- There was a clean-up to the policy language and unnecessary language was taken out
- The 2005 Master Plan was the first master plan that was done for the Town.
- The intention is that the Master Plan and the Comprehensive Plan work together.
- She developed categories for Parks and Developed Open Spaces. This is different from natural Open Spaces.
- Superior has a natural infrastructure. There are limited opportunities going forward so it becomes very important that there be places to do things and that some of these areas are looked at as parks or open space.
- In the recreations section she looked to meet the need of a year round facility. That was something that was strongly laid out in the Master Plan.
- From what was heard from the community, there continues to be a strong desire to have an indoor activity space. The Comprehensive Plan recommends that there needs to be further study in terms of feasibility and the right timing for people to say they are willing to invest in that area.
- Natural Open Space. The focus is to continue to look for areas where protection for habitat is important. Places that offer links in the system to be able to connect to places and also areas that can mitigate impact of other development.
- Make sure that Open Space planning remains a part of ongoing planning for the Town and seek to integrate acquisition and maintenance standards that look and feel like the surrounding jurisdictions.

• In terms of trails, the revised trail network plan is now intended to be the official trail plan for the Town of Superior. The trails recommendation focuses on access and linking, linking neighborhood to public community facilities and businesses.

Commissioner McCool had a comment about the Open Space Summary Report. He said it's only mentioned in the introduction of the Comprehensive Plan and he would like to ask that it be referenced in the Natural Open Space area.

Ms. White continued her presentation with Chapter 11:

- This is a more general approach. The current Comprehension Plan is a very detailed implementation matrix. From experience working with other communities it becomes cumbersome for the Town to track and keep updating that sort of matrix.
- A set of five categories of types of implementation strategies to look at as a Town.
 Policy Decisions, Development Code Amendments, Partnership and Intergovernmental Agreements, Programs and Infrastructure Assessment/Improvements.
- It's a general approach but tied closely with the Town Board goals and to the Plan Goals itself.

Public comments were made by the following:

Suzanne Sawyer-Ratliff 405 S 3rd Ave, said the Planning Commission has been tasked with a big responsibility regarding the Comprehensive Plan and encouraged the Commissioners to take their time and to carefully consider this matter.

Chairperson Folsom closed the public hearing. There was discussion by the Commissioners.

Commissioner Mommaerts said he has read the entire plan and finds it to be thorough. There were things that came up about vehicles but feels it has come a long way. Things he would question would be how to approach the underpass. He is also concerned with how thing would be handled on McCaslin Blvd.

Vice Chairperson Prestesater said he was involved in the last update to the Comprehensive Plan and now this one. He feels the process this time was much better than last time in terms of the facilitation, the number of meetings and the opportunity for input. He is very pleased with the document. The only issue that he has is that he doesn't like is that there isn't more precision where recreational activities would be placed. He understands that is part of the process but he would have liked to see more input. He doesn't want it to keep getting kicked to the curb and then there isn't a place to put it. It is something that is lacking in this community and has been for a long time.

Commissioner Eaton said she thinks the document is excellent. She thinks Vice Chairperson Prestesater is right in that there needs to be more specifics on where to have recreation facilities.

Commissioner Abdul- Williams said she would like to see more activity in the area for quality of life. She is also concerned with McCaslin traffic flow in the future. She doesn't want McCaslin to be a race track for commuters. She is concerned with traffic noise and is looking forward to seeing the traffic plan that is to be presented soon.

Commissioner McCool said he has been through a number of these throughout the years and he agrees that this one of the best he has been through in the last decade. He appreciated the effort that was put in to making this the quality document that it is. He appreciates what Ms. Sawyer-Ratliff said because having been here for so long and seeing new members come in is really good to have fresh eyes and we don't have to rush. Knowing most of these documents he wanted to make sure that there were some elements that were not lost in the update and remain untouched. He likes what he sees so far.

Commissioner Hardin said she appreciates all the hard work that was put into this in terms of all the meetings that were held as that was helpful. There was a lot of community involvement and good representation of residents from the Town who participated.

Chairperson Folsom said this was his first Comprehensive Plan review and when the process began in April he thought it was an ambitious schedule to be done by September. He was impressed with the efficient process throughout the summer; he thought there were ample public meetings and opportunities for online comments. He thought it was a good integration with the Town Center effort and it has all come together nicely. He likes the new plan and he feels it is something he can support. In the transportation section he would like to see added the mention of golf carts; in the open space section there needs to be a reference to the Open Space Summary report and in the recreation section there should be some additional reference made to future planning for future development and how recreation will be integrated with future development.

Commissioner McCool asked if the transportation report would come before the Planning Commission. Ms. Moyski stated that it would go before the Town Board as a work session on October 8th and the Planning Commission is invited and encouraged to attend. Time is tight and we are trying to get everything passed before the end of October. If needed, it could be put as a discussion item for the October 16th meeting.

Commissioner Prestesater moved to approve Resolution #PC-7, Series 2012 A RESOLUTION OF THE PLANNING COMMISSION OF THE TOWN OF SUPERIOR RECOMMENDING APPROVAL OF THE 2012 COMPREHENSIVE PLAN UPDATE with the aforementioned items – alternative methods of transportation including golf carts, the Open Space Summary report, a thorough look at planning for recreation facilities in advance along with all other future developments and the Transportation Plan.

Seconded by Commissioner Mommaerts. Ayes -7 (Abdul-Williams, Eaton, Folsom, Hardin, McCool, Mommaerts, and Prestesater). Absent -2 (Rittmaster, Ricker). Motion carried.

STAFF ANNOUNCEMENTS

Fred Fox reminded everyone that on September 24^{th} the Town Board will have a public meeting on the Superior Town Center. At this point there doesn't appear to be a meeting of the Planning Commission on October 2^{nd} .

The Transportation Plan discussion will be presented to the Board on October 8th. There could be a similar discussion with the Planning Commission on October 16th but Commissioners were encouraged to attend the Board's October 8th work session. At the meeting of October 8th there will be the continued public hearing on the Remington Homes (Coal Creek Crossing) development.

Chairperson Folsom said procedurally when someone wants to speak during the meetings he will call on them before they start to speak to make it clear who is speaking.

Vice Chairperson Prestesater asked what else was on the agenda for October 16th. Ms. Moyski stated that one of the topics would be to Chapter 16 regarding storm drainage. The other piece that was directed by the Town Board was for the Planning Commission to consider extending the length of time election signs can be posted in rights-of-way.

ADJOURNMENT





ITEM NO. 5

INFORMATION FOR MEETING OF THE SUPERIOR PLANNING COMMISSION

AGENDA ITEM NAME: Motion – Recommendation to the Board approval of an

Ordinance repealing certain Sections of Chapter 16 of the Superior Municipal Code and Repealing and Reenacting Article III of Chapter 11, relating to Storm

Water Quality

MEETING DATE: October 16, 2012

PRESENTED BY: Dmitry Tepo, Utilities Superintendent

PRESENTED FOR: Action

BACKGROUND:

The Town of Superior holds a Municipal Separate Storm Sewer Systems (MS4) permit from the Colorado Department of Public Health and Environment (CDPHE). This permit requires Superior to develop, implement, and enforce a stormwater management program resulting in reduction of pollutant discharge to waters of the State of Colorado.

In April of 2012, CDPHE sent a *Targeted Permit Questionnaire* to all MS4 permit holders. This Questionnaire is a self-audit of Superior's stormwater management program, which assesses program components such as standard operating procedures and ordinances used for stormwater quality protection. As a result of this Questionnaire, Superior, along with many other municipalities, is required to update existing stormwater ordinances to maintain compliance with the MS4 permit. Existing and proposed Chapter 11, Article III and Chapter 16, Article XXVI are included for reference. Due to multiple revision iterations, redline versions are not provided.

Typical revision examples are listed below:

- Clarification that only emergency firefighting discharges may be discharged to the storm sewer system. This prohibits discharges associated with activities performed by fire department staff that could be qualified as maintenance, such as fire sprinkler line flushing.
- · Clarifications on stormwater permit issuance procedures and requirements.

- Removal of language authorizing the Town Manager to exempt activities from requirements of the stormwater management program.
- · Additional minor wording changes to comply with CDPHE's requirements.

Language addressing stormwater discharge permitting is currently broken up between Chapters 11 and 16 of the Ordinance. For clarity, all Sections of Chapter 16 related to stormwater permitting were moved to Chapter 11 (16-26-40, 16-26-60-16-26-100). The several stormwater Sections that remain in Chapter 16 are related to development.

PROS:

- Proposed changes maintain permit compliance
- Proposed changes provide a clearer procedure for protection of water quality

CONS:

None.

BUDGET IMPLICATIONS:

None.

MOTION:

Move to recommend to the Board of Trustees approval of an Ordinance repealing sections 16-26-40, 16-26-60, 16-26-70, 16-26-80, 16-26-90 and 16-26-100 of the Superior Municipal Code, and repealing and reenacting Article III of Chapter 11 of the Superior Municipal Code, all relating to Storm Water Quality

ATTACHMENTS:

- Existing Chapter 11, Article III
- Existing Chapter 16, Article XXVI
- Proposed Chapter 11, Article III
- Proposed Chapter 16, Article XXVI

- (3) All demolition and construction material is placed in the Dumpster or roll-off;
- (4) The Dumpster or roll-off is removed within twenty (20) days;
- (5) The Dumpster or roll-off is appropriately marked with reflective materials, including reflective tape at least three (3) feet above the ground; and
- (6) The location of the Dumpster or roll-off does not pose a safety hazard due to roadway or traffic conditions. (Ord. O-8 §3, 2006; Ord. O-5 §1, 2009)

ARTICLE III

Stormwater Requirements

Sec. 11-3-10. Purpose.

The purpose of this Article is to regulate nonstormwater discharges to the MS4, as required by federal and state law, to protect and enhance the water quality of watercourses, water bodies and wetlands in a manner consistent with the Clean Water Act. The objectives of this Article are:

- (1) To regulate the introduction of pollutants to the MS4;
- (2) To prohibit illicit connections and discharges to the MS4;
- (3) To provide for inspection and monitoring procedures necessary to ensure compliance with this Article;
- (4) To reduce pollutants in stormwater discharges from construction activity by guiding, regulating and controlling the design, construction, use and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land;
- (5) To require permanent stormwater runoff controls to be constructed along with development to prevent the deterioration of water quality; and
- (6) To promote public awareness of the hazards involved in the improper discharge of pollutants into the MS4. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-20. Definitions.

For purposes of this Article, the following terms shall have the following meanings:

Best Management Practices (BMPs) means management practices to prevent or reduce the discharge of pollutants directly or indirectly into stormwater, receiving waters or stormwater conveyance systems, including treatment practices, operating procedures and practices to control site runoff, spillage or leaks, sludge or water disposal or drainage from raw materials storage.

CDPHE means the Colorado Department of Public Health and Environment.

Clean Water Act means the Federal Water Pollution Control Act, 33 U.S.C. § 1251, et seq., as amended.

Disturbed area means that area of the land's surface disturbed by any work or activity upon the property by means, including but not limited to grading; excavating; stockpiling soil, fill or other materials; clearing; vegetation removal; removal or deposit of any rock, soil or other materials; or other activities which expose soil. Disturbed area does not include the tillage of land that is zoned for agricultural use.

EPA means the federal Environmental Protection Agency, or its successor.

Facility means any building, including a private home, structure, installation, process or activity, from which there is or may be a discharge of a pollutant.

Hazardous materials means any material, including any substance, waste or combination thereof, which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or significantly contribute to a substantial present or potential hazard to human health, safety or property or to the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Illicit connections means any drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the MS4, including but not limited to any conveyances which allow any non stormwater discharge, including sewage, process wastewater and wash water, to enter the MS4, and any connections to the MS4 from indoor drains, sump pumps and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved.

Illicit discharge means any direct or indirect release of pollutants into the MS4, except as exempted in this Article.

Industrial activity means activities subject to NPDES industrial permits, as defined in 40 C.F.R. § 122.26(b)(14).

Mobile washing operation means a commercial activity involving power washing, steam cleaning and any other method of mobile cosmetic cleaning of, by way of example, the following: vehicles, fabric, pets or exterior surfaces.

Municipal separate storm sewer system (MS4) means publicly owned facilities by which stormwater is collected and conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, pumping facilities, retention and detention basins and natural and human-made or human-altered drainage ditches, channels, lakes/reservoirs and other drainage structures.

National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit or NPDES permit means a permit issued pursuant to Section 402 of the Clean Water Act, including permits issued by the State in compliance with the Clean Water Act.

Nonstormwater discharge means any discharge to the storm drain system that is not composed entirely of stormwater.

Operator means the individual who has day-to-day supervision and control of activities occurring at the construction site and includes the owner, the developer, the general contractor or the agent of one (1) of these parties.

Owner means the person who owns a facility, development, part of a facility or land.

Pollutant means any sewage, sewage biosolids, garbage, chemical waste, biological material, solid waste, incinerator residue, ash, munitions, radioactive material, heat, rock, sand, cellar dirt and industrial and agricultural wastes, or any substances, contaminants or man-made or maninduced impairment of waters or alteration of the chemical, physical, biological or radiological integrity of water in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life or property or which unreasonably interfere with the enjoyment of life or property.

Pollution means the presence in waters of pollutants.

Premises means any building, lot, parcel of land or portion of land, whether improved or unimproved, and includes adjacent sidewalks and parking strips.

Receiving water means any waters of the State that receive a stormwater discharge from the MS4, including all watercourses, even if they are usually dry, and irrigation ditches that receive municipal stormwater, including storm sewer systems owned by other entities.

Spill means any intentional or unintentional release of solid or liquid material which may cause pollution of the MS4 or waters of the State.

Stormwater means any surface flow, runoff and drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation.

Threatened discharge means a condition creating a substantial probability of harm, which makes it reasonably necessary to take immediate action to prevent, reduce or mitigate damages to persons, property or natural resources.

Wastewater means any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

Watercourse means a channel, natural depression, slough, artificial channel, gulch, arroyo, stream, creek, pond, reservoir or lake, including major drainageways, in which stormwater runoff and floodwater flow, either regularly or infrequently.

Waters of the State means any and all surface and subsurface waters that are contained in or flow in or through the State, including all watercourses, even if they are usually dry. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-30. Applicability.

This Article shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by this Article. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-40. Administration.

The Town Manager shall administer, implement and enforce this Article. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-50. Illicit discharge prohibited; exemptions.

- (a) Prohibited discharges. It is unlawful to discharge or cause to be discharged into the MS4 or watercourses any illicit discharge, including but not limited to the following:
 - (1) Chemicals, petroleum products, paint, varnishes, solvents, oil and grease and other automotive fluids, pesticides, herbicides and fertilizers or other toxic materials;
 - (2) Nonhazardous liquid, solid wastes and yard wastes;
 - (3) Hazardous materials, sewage, fecal coliform and pathogens, dissolved and particulate metals;
 - (4) Trash, refuse, rubbish, garbage, food wastes, pet wastes, litter, other discarded or abandoned objects, floatables and cleaning products;
 - (5) Landscaping materials, sediment, lawn clippings, leaves, branches or other landscaping and yard debris;
 - (6) Construction activities wastes and residues, including but not limited to painting, paving, concrete placement, sawcutting, material storage and earthwork;
 - (7) Wastes and residues that result from mobile washing operations, discharges from toilets, sinks, industrial processes, cooling systems, boilers, fabric cleaning, equipment cleaning, commercial vehicle cleaning and substances added to the storm drain to control root growth; or
 - (8) Any other material that is considered harmful to humans, animals or aquatic life and its habitat.
- (b) Exemptions. The following discharges, when properly managed, are exempt from the prohibitions of this Article:
 - (1) Water line flushing or other potable water sources, landscape irrigation or lawn watering, irrigation return flows, diverted stream flows, rising groundwater, uncontaminated groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains, crawl space pumps, air conditioning condensation, springs, individual residential car washing, car washing fundraisers which are less than two (2) consecutive days in duration, natural riparian habitat or wetland flows, swimming pools (if dechlorinated, less than five one-hundredths [0.05]

ppm chlorine), fire-fighting activities, street sweeper wash water and any other water source not containing pollutants.

- (2) Discharges approved by the authorized enforcement agency necessary to protect public health and safety, such as flows from fire-fighting.
- (3) Dye testing, provided that the person undertaking such testing provides verbal notification to the authorized enforcement agency twenty-four (24) hours prior to the time of the test.
- (4) Runoff of roadway anti-icing and de-icing agents, provided that they are applied according to BMPs.
- (c) The prohibitions set forth in this Section shall not apply to any nonstormwater discharge permitted under an NPDES permit, waiver or waste discharge order issued and administered under the authority of the EPA, provided that the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws and regulations, and provided that written approval has been granted by the Town for any discharge into the storm drain system. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-60. Illicit connection prohibited.

It is unlawful to construct, use, maintain or continue the existence of illicit connections to the MS4, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-70. Threatened discharges.

It is unlawful to cause materials to be deposited in such a manner or location as to constitute a threatened discharge into the MS4 or waters of the State. Pollutants that are no longer contained in a pipe, tank or other container are considered to be threatened discharges unless they are actively being cleaned up.

- (1) Cleaning of paved surfaces required. The owner of any paved parking lot, street or drive shall clean the pavement as necessary to prevent an illicit discharge of pollutants. Paved surfaces shall be cleaned by dry sweeping, wet vacuum sweeping, collection and treatment of wash water or other methods in compliance with this Article.
- (2) Materials storage. Materials, including but not limited to stockpiles, used in construction and landscaping activities shall be stored to prevent the release of pollutants.
- (3) Pesticides, herbicides and fertilizers. Pesticides, herbicides and fertilizers shall be applied in accordance with manufacturer recommendations and applicable laws. Pesticides, herbicides and fertilizers shall be stored in a manner to prevent release into the MS4. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-80. Best Management Practices.

The owner or operator of a commercial or industrial establishment or a disturbed area shall provide, at his or her own expense, reasonable protection from accidental discharge of prohibited

materials or other wastes into the MS4 or watercourses through the use of structural and nonstructural BMPs. Further, any person responsible for premises which are, or may be, the source of an illicit discharge may be required to implement, at said person's expense, additional structural and nonstructural BMPs to prevent the further discharge of pollutants into the MS4. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-90. Violations.

- (a) When the Town Manager has reasonable cause to believe that a violation of this Article exists in or upon any premises, the Town Manager may request entry onto the premises at any reasonable time to determine if the owner or operator is complying with this Article. If the owner or occupant refuses entry after a request to enter has been made, the Town Manager may obtain a warrant from a court of competent jurisdiction.
- (b) With consent of the property owner or a valid warrant, the Town Manager may set up such devices that are necessary to conduct an investigation of such discharges. The investigation may include, but is not limited to, the following: sampling of any discharge or process waters, the taking of photographs, interviewing staff on alleged violations and access to any and all facilities or areas within the premises that may have any effect on the discharge.
- (c) If the violation constitutes an immediate danger to public health or safety, the Town Manager is authorized to enter upon the subject private property, without giving prior notice, but in compliance with applicable law, to take any and all measures necessary to abate the violation or restore the property.
- (d) If the Town Manager determines that a violation of this Article exists, and that the nature of such violation is not such as to pose an immediate danger to the public health or public safety, the Town Manager shall serve written notice by certified mail on the current owner of the property on which the violation is occurring to abate the violation within twenty (20) days or have the violation abated by the Town. If such violation is not abated within twenty (20) days, the Town Manager may cause the violation to be abated. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 11-3-100. Notification of spills.

As soon as any person responsible for any premises, facility or operation, or responsible for emergency response for a facility or operation, has information of any known or suspected illicit discharge, that person shall take all necessary steps to ensure the containment and cleanup of such discharge. If hazardous materials are discharged, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the Town Manager in person or by phone no later than twenty-four (24) hours after the release and by written notification within five (5) days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years. (Ord. O-20 §1, 2004; Ord. O-5 §1, 2009)

Sec. 16-25-30. Existing prairie dog colonies.

If there is a healthy, living prairie dog colony located on property to be developed prior to the time of excavation, grading or issuance of a building permit, whichever occurs first, the applicant shall relocate or otherwise remove such prairie dog colony as may be approved by the State Division of Wildlife and the Town prior to any excavation, grading or building on the property. Relocation to a Colorado Division of Wildlife approved site shall occur in a manner that is safe and humane to the prairie dogs. The applicant shall advise the Town in writing of its relocation plans prior to starting the relocation. (Ord. O-10 §1, 2010)

ARTICLE XXVI

Drainage, Stormwater Management and Erosion Control

Sec. 16-26-10. Natural drainage system preferred.

- (a) To the extent practicable, development shall conform to the natural contours of the land, and natural and preexisting manmade drainage ways shall remain undisturbed.
- (b) To the extent practicable, lot boundaries shall coincide with natural and preexisting manmade drainage ways within subdivisions to avoid the creation of lots that can be built upon only by altering such drainage ways. (Ord. O-10 §1, 2010)

Sec. 16-26-20. Proper drainage.

- (a) Developments shall include a drainage system that is adequate to prevent the undue retention of surface water on the development site. Surface water shall not be regarded as unduly retained if:
 - (1) The retention results from a technique, practice or device deliberately installed as part of an approved sedimentation or stormwater runoff control plan; or
 - (2) The retention is not substantially different in location or degree than that experienced by the development site in its predevelopment stage, unless such retention presents a danger to health or safety.
 - (b) No surface water may be channeled or directed into a sanitary sewer.
- (c) When practicable, the drainage system shall coordinate with and connect to the drainage systems or drainage ways on surrounding properties or streets.
- (d) Drainage structures and flood control measures shall be constructed according to the more restrictive of the then-applicable SMD1 Rules and Regulations, Urban Drainage and Flood Control District or Boulder County criteria, except as provided hereafter: Water depth in a one-hundred-year event shall not exceed six (6) inches in parking lots. (Ord. O-10 §1, 2010)

Sec. 16-26-30. Stormwater management.

(a) Drainage and floodplain systems shall be designed to permit the unimpeded flow of natural water courses.

- (b) Developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such developments.
 - (1) No development may be constructed or maintained so that such development unreasonably impedes the natural flow of water from higher adjacent properties across such development, thereby causing substantial change to such higher adjacent properties; and
 - (2) No development may be constructed or maintained so that surface waters from such development are unreasonably collected and channeled onto lower adjacent properties at such locations or at such volumes as to cause substantial damage to such lower adjacent properties.
- (c) The drainage system shall be designed to consider the drainage basin as a whole and shall accommodate not only runoff from the subdivision area but, where applicable, shall be designed to accommodate the runoff from those areas adjacent to and upstream from the subdivision itself, as well as its effects on lands downstream.
- (d) The drainage system shall be designed to prevent any increase in discharge from the development site as a result of development unless it is in a master drainage plan area; then it shall conform to the master drainage plan. Stormwater drainage from the site shall be restricted by the drainage system to a rate equal to the historic discharges from the undeveloped site unless it is in a master drainage plan area.
- (e) Complete drainage systems for the entire development area shall be designed by a professional engineer licensed in the State and qualified to perform such work. All existing drainage features which shall be incorporated in the design shall be so identified. All proposed surface drainage structures shall be indicated and all appropriate designs, details and dimensions necessary to clearly explain proposed construction materials and elevations shall be included in the drainage plans. If the development is to be constructed in phases, a general drainage plan for the entire area shall be presented with the first phase and appropriate development stages for the drainage system for each phase shall be indicated.
- (f) A study detailing methods of handling all drainage shall be approved by the Manager. (Ord. O-10 §1, 2010)

Sec. 16-26-40. Sedimentation and erosion control.

- (a) Purpose and applicability.
- (1) The purpose of the land disturbance and grading permit process is to prevent soil erosion and sedimentation from occurring as a result of nonagricultural development within the Town and to establish minimum standards for the protection of exposed or disturbed soil surfaces and for surface water retention and drainage during and after construction.
- (2) A person proposing to construct buildings or other improvements or facilities or to develop or redevelop land within the Town shall comply with the standards and procedures specified in this Section. No person shall develop land or disturb land until such person has obtained a valid land disturbance permit or has been exempted from this Section. No building permit shall be approved until the applicable requirements of this Section have been met or such requirements have been determined not to be applicable.

- (b) Exemptions. The following activities shall be exempt from this Section unless the Manager determines that a particular hazard exists justifying denial of an exemption in a particular case:
 - (1) Agricultural use.
 - (2) Residential gardening.
 - (3) Grading or an excavation below finished grade for basements, footings, retaining walls or other structures authorized by a valid building permit, provided that grading or excavation work covered by such permit is not left unfinished for more than one (1) year.
 - (4) Construction of a sidewalk or driveway authorized by a valid permit.
 - (5) Gravel, sand, dirt or topsoil removal of less than one-fourth (1/4) of an acre.
 - (6) Installation of utility lines and poles, underground telephone lines and underground power lines as authorized by an excavation permit issued by the Town.
 - (7) Normal, routine maintenance of drainage courses and irrigation ditches.
 - (c) Standards. Soil erosion and sediment control plans shall comply with the following:
 - (1) Initial soil exposure:
 - a. Natural vegetation shall be retained and protected wherever possible.
 - b. Exposure of soil to erosion by removing or disturbing vegetation shall be limited to the area required for immediate construction operations and for the shortest practical period of time.
 - c. Sediment control measures shall be installed prior to the onset of clearing and grading operations to retain sediment on site to the extent practical as determined by the Manager. Such control measures, which may consist of temporary or permanent structural or vegetative runoff control, slope stabilization and revegetation measures, shall be in conformance with the standards set forth in the Town's design standards or the standards of the appropriate special district.
 - d. An erosion and sedimentation control plan shall be submitted to the Town and approved by the Manager.
 - (2) Grading and slope construction:
 - a. The vegetation or ground cover shall not be destroyed, removed or disturbed prior to the date established and approved in the erosion and sediment control plan.
 - b. During grading operations, the property shall be maintained, watered or otherwise treated to prevent dust erosion at all times. Earthwork operations will not be permitted to continue when fugitive dust significantly impacts adjacent public ways or private property as determined by the Manager. An air pollution permit from the Colorado Department of Public Health and Environment, Air Pollution Control Division, may be required, along with a

fugitive dust control plan. It is the applicant's responsibility to acquire the appropriate state permits.

- c. Temporary cut and fill slopes shall not be steeper than two (2) horizontal to one (1) vertical. No work shall be performed outside the permit area without specific prior approval.
- d. Permanent slopes shall not exceed a steepness of three (3) horizontal to one (1) vertical, unless specifically approved in the erosion and sediment control plan.
- e. Diversions or other appropriate measures shall be installed at the top of cut or fill slopes to prevent uncontrolled drainage flows on the disturbed slopes.
- f. Temporary vegetation shall be installed as directed by the Manager if the disturbed site is to be left unimproved for thirty (30) calendar days or more unless otherwise approved by the Manager.
- g. Topsoil shall be stockpiled to the extent practicable on the site for use on areas to be revegetated. Stockpiled soil shall be located and protected so that it is not transmitted through erosion to downstream properties or drainageways. Cover or temporary vegetation shall be applied within fourteen (14) days to any soil stockpiles which will remain in place for longer than thirty (30) calendar days.
- h. Grading shall not be performed in such a manner so as to divert uncontrolled flows onto adjacent property or into any sanitary sewer system.
- i. Fills shall not encroach on defined drainageways or existing channels without an approved drainage report.
- j. Grading equipment shall not cross or disturb live stream channels or improved channels, except by means of approved crossings.
- k. Graded and excavated materials shall not be deposited or stored in or alongside rivers or watercourses where the materials can be washed away by high water or storm runoff.
- l. An excavation or construction within public rights-of-way, affecting public property, grounds or any publicly owned utility system, or within a street or utility easement shall comply with the Town's right-of-way regulations.

(3) Runoff control.

- a. Sediment transported by runoff water shall be retained on site through the use of sediment basins, silt traps or other approved measures. Sediment caused by accelerated soil erosion shall be removed from runoff water before such water leaves the site.
- b. Increased runoff caused by changed soil and surface conditions during and after site earthwork construction shall be accommodated on site and structurally delayed to reduce sedimentation.
- c. On-site surface runoff shall be disposed of at nonerosive velocities at established drainage locations. Any temporary or permanent facility designed and constructed for the

conveyance of water around, through or from the earth change area shall be designed to limit the water flow to a nonerosive velocity.

- d. Drainage swales used to divert surface waters shall be vegetated or stabilized to control erosion in concentrated flow areas. This treatment shall be based on proposed velocities.
- (4) Requirements for preparation of erosion and sediment control plan.
- a. The erosion and sediment control plan shall be prepared in accordance with Subsections (1), (2), and (3) hereof and the current volume of "Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Best Management Practices," which provides technical information and guidelines for preparation of an erosion and sediment control plan.
- b. The erosion and sediment control plan shall be prepared under the guidance of and stamped by a licensed professional engineer unless the land disturbance is less than one (1) acre and the potential impact on adjacent properties and downstream receiving waters is insignificant. If, after reviewing the information submitted by the applicant, the Manager concurs that the land disturbance will potentially have an insignificant impact, the licensed professional engineer requirement may be waived if the work does not involve engineering design.
- (d) Procedure. This Subsection establishes a two-stage process to govern land disturbance within the Town.
 - (1) All persons within the Town wishing to disturb land shall file with the Manager an application describing the proposed location and extent of the land disturbance activity.
 - (2) A land disturbance permit is required if the Manager determines that the land disturbance is not exempt under this Section. If a permit is required, an erosion and sedimentation control plan shall be submitted to the Town and approved by the Manager. No grading, vegetation removal, filling or other land disturbance shall occur until the Manager has issued a permit.
 - (3) Prohibited activity. No permit shall be issued if:
 - a. The proposed work, in the opinion of the Manager, would cause erosion or sedimentation which would cause hazards to the public safety and welfare;
 - b. The proposed work will damage public or private property or interfere with any existing drainage course or irrigation ditch in such a manner as to cause damage to any adjacent property or result in the deposition of debris or sediment on any public way or into any waterway or create an unreasonable hazard to persons or property;
 - c. The site is subject to geologic hazard to the extent that no reasonable amount of corrective work can eliminate or sufficiently reduce settlement, slope, instability or other such hazard to persons or property; or
 - d. The site lies within a designated floodplain of any stream or water course, unless a hydrologic report prepared by a professional engineer is submitted certifying that the proposed land disturbance will have no detrimental influence upon the public welfare or upon the total development of the watershed, and such conclusion is approved by the Manager.

- (4) Application. The applicant shall submit a separate application for each site upon which such land disturbance is to occur, and each application shall contain the following:
 - a. Location, size, legal description, owner, developer and existing zoning of the property, with a vicinity map indicating the site location and identifying adjacent properties and ownerships.
 - b. A soils survey that describes the soils on the site including slopes, hydrologic soil groups, soil types and erodibility factors.
 - c. A site plan at a maximum scale of one (1) inch equals one hundred (100) feet on a twenty-four-inch by thirty-six-inch sheet, containing the following information at a minimum:
 - 1. Name, address and telephone number of the landowner, developer and applicant.
 - 2. A timing schedule indicating the anticipated starting and completion dates of the development's construction and sequence and time of exposure of each area prior to completion of effective erosion and sediment control measures.
 - 3. A statement of the quantity of excavation and fill involved.
 - 4. Existing and proposed topography at a minimum of two-foot contour intervals.
 - 5. Location of any existing structures or natural features on and within fifty (50) feet of the site boundary lines, as well as the location of proposed additional structures or development on the site.
 - 6. Location of all temporary and permanent erosion and sediment control facilities, including coordination with proposed drainage facilities.
 - 7. Elevations, dimensions, location, extent and slope of all proposed grading (including building and driveway grades).
 - 8. The estimated total cost of the required temporary and permanent soil erosion control measures.
 - 9. Plans of all drainage provisions, retaining walls, cribbing, planting, erosion control measures or other temporary or permanent soil erosion control measures to be constructed in connection with, or as a part of, the proposed work.
 - 10. Other information or data as may be reasonably required by the Manager.
 - 11. A report summarizing all of the above information, signed by the applicant.
- (5) Application fee. At the time of filing an application, the application fee shall be paid to the Town. The Town may request additional deposits from the applicant if it appears at any time that the fee will not be sufficient to cover the Town's expenses in evaluating the application. Failure to furnish such deposit is cause to deny the application.

- (6) Administrative review. The application for a land disturbance permit shall be reviewed by the Manager and shall be approved if the application complies with this Chapter.
- (7) Modification of plan. The Town may approve, disapprove or approve with conditions an application to allow a new or modified erosion and sediment control technique or plan amendment. In examining such application, the Town may require reports and data sufficient to render a decision. No grading work in connection with any proposed modification shall be permitted without the approval of the Town.

(e) Permittee responsibilities.

- (1) The permittee shall install and perform all erosion and sediment control measures in accordance with the approved erosion and sediment control plan. All other construction shall be completed according to the approved final construction drawings and specifications. All erosion and sediment control measures, both temporary and permanent, shall be adequately maintained by the permittee and all subsequent owners of the property, unless otherwise agreed to by the Town.
- (2) Regular maintenance, including mowing, sediment removal, repairs of eroded areas, cleaning of inlets and outlets, debris removal and weed control, shall be performed as needed. All erosion and sediment control facilities shall be inspected following any heavy rainfall, and any necessary emergency maintenance shall be completed as soon as possible thereafter. If maintenance is not performed, the Town may elect to maintain the erosion and sediment control facilities and charge the owner for all costs associated with the maintenance performed.
 - (3) During grading operations, the permittee shall be responsible for:
 - a. The prevention of damage to public utilities or services within the limits of grading and along routes of travel of the equipment.
 - b. The prevention of damage to adjacent property. No person shall grade on land so close to the property line as to endanger any adjoining public street, sidewalk, alley or public or private property without supporting and protecting such property from settling, cracking or other damage which might result.
 - c. The immediate removal of all soil, miscellaneous debris or other materials applied, dumped or otherwise deposited on public streets, highways, sidewalks, public thoroughfares or irrigation ditches during transit to and from the construction site, where such spillage constitutes a public hazard in the determination of the Manager.

(f) Enforcement and inspection.

- (1) The Town may conduct periodic inspections to determine whether the work covered by the land disturbance permit is in conformance with the approved erosion and sediment control plan. The Town may prohibit further work to be done if such work does not comply with the approved plan.
- (2) Upon satisfactory execution of all approved plans and receipt of a written statement by a registered engineer that all improvements have been constructed according to plan, the Town shall issue a certificate of completion. (Ord. O-10 §1, 2010)

Sec. 16-26-50. Drainage and stormwater within the Coal Creek Basin.

All plans and permits for construction within the Coal Creek Basin shall be approved by the Town only if the application is in conformance with and provides for the drainage improvements and stormwater control set forth in the current Coal Creek Master Drainage Plan for the property for which plan or permit approval is sought. For purposes of this Section, the Coal Creek Basin shall mean all properties within the boundaries of the Town lying north of the Superior Water Treatment Plant. (Ord. O-10 §1, 2010)

Sec. 16-26-60. Stormwater quality requirements.

- (a) CDPHE permit required. It is unlawful to conduct any activity resulting in the following total disturbed area without first obtaining a CDPHE stormwater general permit for construction activities:
 - (1) One (1) acre or more.
 - (2) Less than one (1) acre if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.
- (b) Town land disturbance permit required. A land disturbance or grading permit from the Town may be required in areas with a potential high effect on water quality regardless of the size of the total disturbed area in conjunction with approval of a final subdivision plat, special use permit or site development plan, or if the construction activities are adjacent to a watercourse or wetlands.
 - (c) The following activities are exempt from this Article:
 - (1) Agricultural land management activities; and
 - (2) Maintenance and repair to any stormwater facility or practice deemed necessary by the Manager.
- (d) If required in Subsection (a) hereof, an application for a grading or building permit from the Town shall also include documentation of an application for a CDPHE stormwater general permit for construction activities and a completed SWMP plan.
- (e) Construction activities may not proceed until permit approval is received from the CDPHE, if required, and the Town. (Ord. O-10 §1, 2010)

Sec. 16-26-70. Construction stormwater management plan (SWMP).

- (a) The SWMP shall be prepared in accordance with the requirements of the most recent SWMP guidance document prepared by the CDPHE.
- (b) The owner shall maintain the approved SWMP on site at all times and shall be prepared to respond to maintenance of specific BMPs.
- (c) The owner shall inspect all BMPs at least every fourteen (14) days and within twenty-four (24) hours after any precipitation or snowmelt event that causes surface runoff. Inspections of BMPs shall be conducted by an individual who has successfully completed training in erosion and sediment

control by a recognized organization acceptable to the Manager. A certification of successful completion of such training shall be provided upon request.

- (d) Based on inspections performed by the owner or by Town personnel, modifications to the SWMP will be necessary if at any time the specified BMPs do not meet the objectives of this Article. In this case, the owner shall meet with Town personnel to determine the appropriate modifications. All modifications shall be completed within seven (7) days of the referenced inspection and shall be recorded on the owner's copy of the SWMP.
- (e) SWMP review. The operator shall amend the plan if there is a significant change in design, construction, operation or maintenance, which has a significant effect on the potential for discharge of pollutants to the MS4 or receiving waters, or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activities.
- (f) Records of inspection shall be maintained on site with the SWMP and shall be available to the Town inspector upon request. (Ord. O-10 §1, 2010)

Sec. 16-26-80. Technical standards and specifications.

All BMPs designed to meet the requirements of this Article shall comply with the following technical standards:

- (1) Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual Volume 3-BMP, as amended.
 - (2) SMD1 Rules and Regulations.
- (3) Any other alternative methodology approved by the Town which is demonstrated to be effective. (Ord. O-10 §1, 2010)

Sec. 16-26-90. Post-construction requirement of permanent BMPs.

- (a) Land development shall address stormwater runoff quality through the use of permanent BMPs which shall be maintained in perpetuity. For land disturbances that meet the conditions of Subsections 16-26-60(a) and (b), permanent BMPs for post-construction shall be required in accordance with this Section.
 - (1) Structural BMPs located on private property shall be constructed, owned and operated by the owner of the property on which the BMP is located unless the Town, in writing, agrees that a person other than the owner shall construct, own or operate such BMP.
 - (2) As a condition of approval of the BMP, the owner shall also agree to maintain the BMP to its design capacity unless or until the Town relieves the property owner of that responsibility in writing. The obligation to maintain the BMP shall be memorialized on the subdivision plat, annexation plat, development agreement or other instrument or in a form acceptable to the Town and shall be recorded in the office of the County Clerk and Recorder.
- (b) Certification of permanent BMPs. Prior to final acceptance of a project, all applicants are required to submit "as-built" plans for any permanent BMPs after final construction is completed, and

the plans shall be certified by a Colorado licensed professional engineer. A final inspection by the Town is required before the release of any performance securities can occur.

- (c) Ongoing inspection and maintenance of permanent BMPs.
- (1) Maintenance agreements. The owner of the site shall, unless an on-site stormwater management facility or practice is dedicated to and accepted by the Town, execute an inspection and maintenance agreement that shall be binding on all subsequent owners of the permanent BMPs.
- (2) Long-term inspection of permanent BMPs. Permanent BMPs included in a final construction plan, which are subject to an inspection and maintenance agreement, shall undergo ongoing inspections to document maintenance and repair needs and to ensure compliance with the requirements of the agreement, the plan and this Article. (Ord. O-10 §1, 2010)

Sec. 16-26-100. Financial security.

- (a) As a condition for the issuance of a permit pursuant to this Article, the applicant shall provide security in the form of an irrevocable letter of credit in a form acceptable to the Town Attorney. The amount of the security shall be one hundred ten percent (110%) of the estimated cost of the work required to ensure compliance with the permit's terms and conditions and requirements of this Article. In determining the cost of work, a fifteen-percent administrative fee shall be included.
- (b) The security shall be released upon the Town's determination that the permittee has successfully completed all required work and met all other requirements of this Article.
- (c) If the permittee does not successfully complete all required work or violates any requirement of the permit or this Article, the Town may take corrective measures and charge the costs of such to the permittee. Such costs shall include the actual cost of any work deemed necessary by the Town plus reasonable administrative and inspection costs and penalties pursuant to the Town's stormwater quality enforcement policy. If the total of such costs exceeds the security, the permittee shall be responsible for payment of the remaining balance within thirty (30) calendar days of receipt of an accounting of such from the Town.
- (d) Upon final inspection and issuance of a certificate of completion by the Town, the security shall be released. (Ord. O-10 §1, 2010)

ARTICLE XXVII

Steep Slope Areas

Sec. 16-27-10. Purpose.

Land which has slopes in excess of twenty percent (20%) shall be designated as a steep slope area, which is susceptible to erosion, and development has the potential of creating unstable slope conditions that are hazardous to inhabitants and property. (Ord. O-10 §1, 2010)

TOWN OF SUPERIOR ORDINANCE NO. O-____ SERIES 2012

AN ORDINANCE OF THE BOARD OF TRUSTEES OF THE TOWN OF SUPERIOR REPEALING SECTIONS 16-26-40, 16-26-60, 16-26-70, 16-26-80, 16-26-90 AND 16-26-100 OF THE SUPERIOR MUNICIPAL CODE, AND REPEALING AND REENACTING ARTICLE III OF CHAPTER 11 OF THE SUPERIOR MUNICIPAL CODE, ALL RELATING TO STORMWATER QUALITY

NOW BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF SUPERIOR, COLORADO:

- <u>Section 1.</u> Sections 16-26-40, 16-26-60, 16-26-70, 16-26-80, 16-26-90 and 16-26-100 of the Superior Municipal Code is hereby repealed in their entirety.
- <u>Section 2</u>. Article III of Chapter 11 of the Superior Municipal Code is hereby repealed in its entirety and reenacted as set forth in **Exhibit A**, attached hereto and incorporated herein by this reference.
- <u>Section 3.</u> Severability. If any article, section, paragraph, sentence, clause, or phrase of this Ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of Trustees hereby declares that it would have passed this Ordinance and each part or parts hereof irrespective of the fact that any one or part or parts be declared unconstitutional or invalid.
- <u>Section 4.</u> <u>Safety</u>. This Ordinance is deemed necessary for the protection of the health, welfare and safety of the community.

INTRODUCED,	READ,			ORDERED	PUBLISHED	this
ATTEST:			Andr	rew Muckle	, Mayor	
Phyllis L. Hardin		 Clerk-Tre	asureı	:		

EXHIBIT A

ARTICLE III

Stormwater Quality

Sec. 11-3-10. Purpose.

- (a) The purpose of this Article is to regulate discharges into the municipal separate storm sewer system, as required by federal and state law, to protect and enhance the water quality of watercourses, water bodies and wetlands in a manner consistent with the Clean Water Act.
- (b) The objectives of this Article are:
 - (1) To regulate the introduction of pollutants to the municipal separate storm sewer system ("MS4");
 - (2) To prohibit illicit connections and discharges to the MS4;
 - (3) To provide for inspection and monitoring procedures necessary to ensure compliance with this Article;
 - (4) To reduce pollutants in stormwater discharges from construction activity by guiding, regulating and controlling the design, construction, use and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land;
 - (5) To require permanent stormwater runoff controls to be constructed with development to reduce, to the maximum extent practicable, the deterioration of water quality; and
 - (6) To promote public awareness of the hazards involved in the improper discharge of pollutants into the MS4.

Sec. 11-3-20. Definitions.

For purposes of this Article, the following terms shall have the following meanings:

Applicant means any individual, partnership, corporation, non-profit agency, public agency or the assigns of the above, requesting permission to engage in land disturbance.

Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, general good housekeeping pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CDPHE means the Colorado Department of Public Health and Environment.

CDPS means the Colorado Discharge Permit System.

Clean Water Act means the Federal Water Pollution Control Act, 33 U.S.C. § 1251, et seq., as amended.

Disturbed Area means that area of the land's surface disturbed by any work or activity upon the property by means, including without limitation: grading; excavating; stockpiling soil, fill, or other materials; clearing; vegetation removal; removal or deposit of any rock, soil or other materials; or other activities which expose soil; but excluding the tillage of land that is zoned for agricultural use.

Facility means any building, including a private home, structure, installation, process or activity, from which there is or may be a discharge of a pollutant.

Hazardous material means any material, including any substance, waste, or combination thereof, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property or to the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illicit connection means any drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the MS4, including, but not limited to, any conveyances which allow any non-stormwater discharge, including sewage, process wastewater, and wash water, to enter the MS4; and any connections to the MS4 from indoor drains, sump pumps and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved.

Illicit discharge means a direct or indirect release of pollutants to the MS4, except as exempted in this Article.

Mobile washing operation means a commercial activity involving power washing, steam cleaning, and any other method of mobile cosmetic cleaning of, by way of example, the following: vehicles, fabric, pets or exterior surfaces.

Municipal Separate Storm Sewer System ("MS4") means a publicly owned facility by which stormwater is collected and conveyed, including, but not limited to, any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, pumping facilities, retention and detention basins, and natural and human-made or altered drainage ditches, channels, lakes/reservoirs and other drainage structures.

National Pollutant Discharge Elimination System (NPDES) Permit or NPDES Permit means a permit issued pursuant to Section 402 of the Clean Water Act.

Non-stormwater discharge means a discharge to the storm drain system that is not composed entirely of storm water.

Operator means the individual who has day-to-day supervision and control of operational activities.

Owner means the person who owns a facility, development, part of a facility, or land.

Pollutant means sewage, sewage biosolids, garbage, chemical waste, biological material, solid waste, incinerator residue, ash, munitions, radioactive material, heat, rock, sand, cellar dirt and industrial and agricultural wastes that are no longer contained in a pipe, tank or other container.

Pollution means the presence in waters of the State of any substances, contaminations, or manmade or man induced impairment of waters or alteration of chemical, physical, biological, or radiological integrity of water in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property or which unreasonably interfere with the enjoyment of life or property unless authorized by applicable law.

Premises means a building, lot, parcel of land or portion of land, whether improved or unimproved, and including adjacent sidewalks and parking strips.

Receiving water means waters of the State that receives a stormwater discharge from the MS4, including all watercourses, even if they are usually dry, and irrigation ditches that receive municipal stormwater, including storm sewer systems owned by other entities.

SMD1 means the Superior Metropolitan District No. 1

Spill means the intentional or unintentional release of solid or liquid material which may cause pollution of the MS4 or waters of the State.

Stormwater means surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation.

Stormwater General Discharge Permit Associated with Construction Activity means a permit issued to developers or others undertaking land disturbance activities by the CDPHE, Water Quality Control Division to allow the discharge of stormwater runoff from construction activities.

Stormwater Management Plan (SWMP) means an Erosion Control Plan describing the BMPs and activities to be implemented to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollution discharges to stormwater, MS4 or receiving waters.

Stormwater quality permit means a permit issued to authorize work to be performed under this Article.

Threatened discharge means a condition creating a substantial probability of harm, which makes it reasonably necessary to take immediate action to prevent, reduce or mitigate damages to persons, property or natural resources.

Wastewater means water or other liquid, other than uncontaminated stormwater, discharged from a facility.

Watercourse means a channel, natural depression, slough, artificial channel, gulch, arroyo, stream, creek, pond, reservoir or lake, including major drainageways, in which stormwater runoff and floodwater flow, either regularly or infrequently.

Waters of the State means all surface and subsurface waters that are contained in or flow in or through the State of Colorado, including all watercourses, even if they are usually dry.

Sec. 11-3-30. Applicability.

This Article shall apply to all water entering the MS4 generated on any developed or undeveloped lands unless explicitly exempted by this Article.

Sec. 11-3-40. Illicit discharges prohibited.

- (a) Illicit discharges enumerated. No person shall discharge or cause to be discharged into the MS4 or watercourses any illicit discharge, including without limitation the following:
 - (1) Chemicals, petroleum products, paint, varnishes, solvents, oil and grease and other automotive fluids, pesticides, herbicides and fertilizers or other toxic materials;

- (2) Nonhazardous liquid, solid wastes and yard wastes;
- (3) Hazardous materials, sewage, fecal coliform and pathogens, dissolved and particulate metals;
- (4) Trash, refuse, rubbish, garbage, food wastes, pet wastes, litter, other discarded or abandoned objects, floatables and cleaning products;
- (5) Landscaping materials, sediment, lawn clippings, leaves, branches or other landscaping and yard debris;
- (6) Construction activities wastes and residues including, but not limited to, painting, paving, concrete placement, saw cutting, material storage and earthwork;
- (7) Wastes and residues that result from mobile washing operations; discharges from toilets; sinks; industrial processes; cooling systems; boilers; fabric cleaning; equipment cleaning; commercial vehicle cleaning and substances added to the storm drain to control root growth; and
- (8) Any other material that is considered harmful to humans, animals or aquatic life and its habitat.
- (b) Exemptions: The following discharges, when properly managed, are exempt from this Section:
 - (1) Water line flushing or other potable water sources, landscape irrigation or lawn watering, irrigation return flows, diverted stream flows, rising groundwater, uncontaminated groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains, crawl space pumps, air conditioning condensation, springs, individual residential car washing, natural riparian habitat or wetland flows or swimming pools (if dechlorinated, less than five one-hundredths [0.05] ppm chlorine).
 - (2) Flows from emergency fire-fighting activities and water incidental to street sweeping, including associated sidewalks and medians and that is not associated with construction.
 - (3) Anon-stormwater discharge permitted under an NPDES or CDPS permit.
 - (4) A non-stormwater discharge for which an authorization, or formal commitment to not pursue enforcement actions against under a policy or waste discharge order is issued and administered under the authority of the CDPHE, provided that the discharger is in full compliance with all requirements of the policy or order.
 - (5) The Town may exempt in writing a non-stormwater discharge that is found by the Town Manager to not be a significant source of pollutants to the MS4, because of the nature of the discharge.

Sec. 11-3-50. Illicit connections prohibited.

The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited. This prohibition expressly includes illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

Sec. 11-3-60. Threatened discharges.

It is unlawful to cause materials to be deposited in such a manner or location as to constitute a threatened discharge into the MS4 or waters of the State. Pollutants that are no longer contained in a pipe, tank or other container are considered to be threatened discharges unless they are actively being cleaned up.

- (1) Cleaning of paved surfaces required: The owner of any paved parking lot, street or drive shall clean the pavement as necessary to reduce, an illicit discharge of pollutants. Paved surfaces shall be cleaned by dry sweeping, wet vacuum sweeping, collection and treatment of wash water or other methods in compliance with this Article.
- (2) Materials storage. Materials, including without limitation stockpiles used in construction and landscaping activities shall be stored to reduce, to the maximum extent possible the release of pollutants.
- (3) Pesticides, herbicides and fertilizers. Pesticides, herbicides and fertilizers shall be applied in accordance with manufacturer recommendations and applicable laws. Pesticides, herbicides and fertilizers shall be stored in a manner to prevent release into the MS4.

Sec. 11-3-70. Best Management Practices.

The owner or operator of a commercial or industrial establishment or a disturbed area shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 or watercourses through the use of structural and nonstructural BMPs.

Sec. 11-3-90. Notification of spills.

As soon as any person responsible for any premises, facility or operation, or responsible for emergency response for a facility or operation, has information of any known or suspected release of materials which are resulting or may result in illicit discharges or pollutants discharging into stormwater, the MS4, or waters of the State, that person shall take all necessary steps to ensure the discovery, containment and cleanup of such discharge.

Sec. 11-3-100. Stormwater quality permit requirements.

- (a) Permit required: It is unlawful to conduct any activity resulting in the following total disturbed areas without first obtaining a stormwater quality permit for construction activities:
 - (1) A parcel of one (1) acre or more.
 - (2) A parcel of less than one (1) acre if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.
- (b) A stormwater quality permit from the Town is required in areas with a potential high effect on water quality, regardless of the size of the total disturbed area, in conjunction with approval of a final subdivision plat, special use permit or site development plan, or if the construction activities are adjacent to a watercourse or wetlands.
- (c) Agricultural land management activities, except point source discharges subject to NPDES or CDPS permitting requirements, shall be exempt from this Section.

(d) If required in Subsection (a) hereof, an application for a stormwater quality or building permit from the Town shall also include documentation of an application for a CDPHE stormwater general permit for construction activities.

Sec. 11-3-110. Construction Stormwater Management Plan (SWMP).

- (a) Preparation. The SWMP shall be prepared in accordance with engineering, hydrological and pollution control practices outlined in the Town's current standards and specifications for design and construction of public improvements.
- (b) SWMP required on-site. The owner shall maintain the approved SWMP on site at all times and shall be prepared to respond to maintenance of specific BMPs.
- (c) Installation. The owner shall ensure erosion, sediment and waste control BMPs are implemented.
- (d) Inspection. The owner shall inspect all BMPs at least every fourteen (14) days and within twenty-four (24) hours after any precipitation or snowmelt event that causes surface runoff. Inspections of BMPs shall be conducted by an individual who has successfully completed training in erosion and sediment control by a recognized organization acceptable to the Town Manager. A certification of successful completion of such training shall be provided to the Town upon request.
- (e) Maintenance. BMPs shall be continuously maintained in good operating condition and repaired immediately when damaged.
- (f) Minor modifications. Based on inspections performed by the owner or by the Town, minor modifications to the SWMP will be necessary if at any time the specified BMPs do not meet the objectives of this Article or equivalent or better BMPs are implemented. All minor modifications shall be recorded on the owner's copy of the SWMP which shall be made available to the Town during inspections.
- (g) Major modifications. Whenever there is a significant change in design, construction, operation, or maintenance, which has a significant effect on the hydrology or potential for discharge of pollutants to the MS4 or receiving waters, a SWMP shall be submitted to the Town for review and approval.
- (h) Records. Records of inspection shall be maintained on site with the SWMP and shall be available to the Town upon request.

Sec. 11-3-120. Technical standards and specifications.

All BMPs designed to meet the requirements of this Article shall comply with the following technical standards at the time the application is filed:

- (1) Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual Volume 3-BMP, as amended.
- (2) SMD1 Rules and Regulations.
- (3) Any other alternative methodology approved by the Town which is demonstrated to be effective.

Sec. 11-3-130. Post-construction requirements.

- (a) Permanent BMPs. Land development projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development, shall address stormwater runoff quality through the use of permanent BMPs which shall be maintained in perpetuity.
 - (1) Structural BMPs include, but are not limited to, detention and retention ponds, infiltration basins, engineered sedimentation and pollutant removal facilities that are designed to reduce pollutants.
 - (2) Non-structural BMPs are practices-which focus on site planning and site operations. Site planning that emphasizes preserving open space, protecting natural systems, clustering and concentrating development, minimizing disturbed areas and incorporating landscape features to manage stormwater at its source is an example.
 - (3) As a condition of approval of the BMP, the owner shall also agree to maintain the BMP to its design capacity unless or until the Town relieves the property owner of that responsibility in writing. The obligation to maintain the BMP shall be memorialized on the plat, development agreement or other instrument or in a form acceptable to the Town.
- (b) Certification. Upon completion of a development or redevelopment project, and before a certificate of occupancy is issued, the Town shall be provided a written certification stating that the completed project is in compliance with the approved final plan. All applicants shall submit "as-built" plans for permanent BMPs after final construction is completed, certified by a Colorado licensed professional engineer. A final inspection by the Town is required before the release of any performance securities can occur.
- (c) Ongoing inspection and maintenance.
 - (1) Maintenance agreements. The owner of a parcel with privately maintained BMP's must execute an agreement addressing maintenance of BMP's that shall be binding on all subsequent owners of the permanent BMPs.
 - (2) Long-term inspection and maintenance. Permanent BMPs included in a final drainage plan shall undergo ongoing inspections to document maintenance and repair needs and to ensure compliance with the requirements of the plan and this Article. A person who transfers ownership of land on which BMPs are located, or will be located, or who otherwise transfers ownership of BMPs or responsibility for the maintenance of BMPs to another person or entity, shall provide written notice to the Town within thirty (30) days of such transfer and shall also provide clear written notice of the maintenance obligations associated with BMPs to the new or additional owner prior to transfer.

Sec. 11-3-140. Letter of credit.

- (a) As a condition for the issuance of a permit pursuant to this Article, the applicant may be required to provide security in the form of an irrevocable letter of credit in a form acceptable to the Town Attorney. The amount of the security shall be one hundred fifteen percent (115%) of the estimated cost of the work. In determining the cost of work, a fifteen percent (15%) administrative fee shall be included.
- (b) If the permittee does not successfully complete all required work or violates any requirement of the permit or this Article, the Town may take corrective measures and charge the costs of such to the

permittee and deduct such costs from the letter of credit. Such costs shall include the actual cost of any work deemed necessary by the Town plus reasonable administrative and inspection costs and penalties. If the total of such costs exceeds the letter of credit, the permittee shall be responsible for payment of the remaining balance within thirty (30) days of receipt of an accounting of such from the Town.

Sec. 11-3-150. Violation; penalty,

- (a) Violation. It is unlawful for any person to violate any provision of this Article.
- (b) Enforcement. The Town Manager shall have the power to conduct inspections, give verbal direction, issue notices of violations and implement other enforcement actions under this section. When the Town Manager has cause to believe that there exists any condition which constitutes a violation of this Article, the Manager shall have the right to enter the premises at any reasonable time to determine if there exists an actual or potential violation of this Article. If the owner or occupant refuses entry after a request to enter has been made, the Town may seek assistance from a court of competent jurisdiction. With consent of the property owner or a valid warrant, the Town Manager may set up on any property such devices that are necessary to conduct an investigation of discharges. The investigation may include without limitation: sampling of any discharge or process waters; the taking of photographs; interviewing; and access to any and all facilities or areas within the premises that may have any effect on the discharge.
- (c) Abatement. If the violation constitutes an immediate danger to public health or public safety, the Town Manager may enter upon the subject property without notice to take any and all measures necessary to abate the violation.

(d) Cost of abatement.

- (1) If the Town abates a violation, then within ten (10) days after abatement of the violation, the owner of the property shall be notified of the cost of abatement, including administrative costs, by personal delivery or by mail to the last known address of the owner as shown in the records of the County Assessor. The notice shall be effective upon the date of mailing or personal delivery. The property owner may file a written protest objecting to the amount of the assessment within ten (10) days of the date of the notice.
- (2) If no protest is filed, then the charges shall become due and payable on the date set forth in the notice, which date shall be after the expiration of the time in which to file an appeal, and such charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.
- (3) If a protest is filed, the Town Manager shall hold a hearing on such protest within fifteen (15) days from the date of receipt of the protest and issue an order on the protest within five (5) days of completion of the hearing. If the charges are upheld, then such charges shall become due and payable ten (10) days after the issuance of the order.
- (4) If the amount due is not paid when due, the charges shall become a special assessment against the property and shall constitute a first and prior lien on the property for the amount of the assessment. The Town shall certify the assessment to the County Treasurer for collection in the same manner as the collection of general property taxes.
- (e) Stop work order: When the Town Manager determines that any activity is occurring which violates this Article, the Town Manager may order all activity stopped upon service of written notice upon the owner or operator. The owner or operator shall immediately stop all activity until authorized in

writing by the Town to proceed. If the owner or operator cannot be located, the stop work order shall be posted in a conspicuous place upon the area where the activity is occurring, stating the nature of the violation. It is unlawful for any owner or operator to fail to comply with a stop work order.

- (f) Public nuisance. A condition existing in violation of this Article is a threat to public health, safety, and welfare, and is declared to be a public nuisance.
- (g) Penalties. In addition to any other specific penalty provided herein, violations of this Article shall be subject to the penalties outlined in Chapter 1 of this Code.



ITEM NO. 6

INFORMATION FOR MEETING OF THE SUPERIOR PLANNING COMMISSION

AGENDA ITEM NAME: Discussion regarding Chapter 18, Article VI of the

Superior Municipal Code and Adopting a new Chapter

15, relating to Flood Regulations

MEETING DATE: October 16, 2012

PRESENTED BY: Alex Ariniello, Public Works Superintendent

PRESENTED FOR: Action

BACKGROUND:

The National Flood Insurance Program (NFIP) is a federal program that enables property owners to purchase flood insurance. Established by Congress through the National Flood Insurance Act of 1968, the NFIP is operated under the jurisdiction of the Federal Emergency Management Agency (FEMA). This flood insurance is designed to provide an alternative to federal disaster assistance for property damage caused by floods. Flood insurance is generally unavailable through private-sector insurance companies.

For a community to participate in the NFIP, it must adopt and enforce floodplain management regulations that meet or exceed the minimum NFIP standards and requirements. These standards are intended to prevent loss of life and property, as well as economic and social hardships that result from flooding. In return for the local adoption and enforcement of floodplain management regulations, the Federal Emergency Management Agency (FEMA) provides the availability of flood insurance coverage within the community. The State of Colorado adopted higher standards for floodplain management, which are outlined in the Rules and Regulations for Regulatory Floodplains in Colorado (Rules), effective January 14, 2011. The Rules are the effective minimum standards for the State of Colorado and communities have three years from January 14, 2011 to adopt a local ordinance consistent with the Rules. This model ordinance is adapted from the FEMA model ordinance and incorporates the minimum standards of the State of Colorado contained in the Rules.

The Town's flood regulations are currently contained in Chapter 18, Article VI of the Superior Municipal Code. These regulations will be repealed and replaced with a new Chapter (Chapter 15) consistent with the model ordinance referenced above.

The proposed regulations reference the *Flood Insurance Study for Boulder County and Incorporated Areas*, which has an effective date of December 18, 2012. This study includes a *Flood Insurance Rate Map* (FIRM). The four panels covering most of the Town of Superior are enclosed.

RECOMMENDED ACTION:

Approve changes in Flood Regulations as to be contained in Chapter 15.

PROS:

• Property Owners in Superior will continue to obtain flood insurance through the National Flood Insurance Program.

CONS:

None

BUDGET IMPLICATIONS:

None

MOTION:

Move to recommend to the Board of Trustees approval of the Ordinance repealing Chapter 18, Article VI of the Superior Municipal Code and adopting a new Chapter 15 of the Superior Municipal Code, relating to Flood Regulations.

ATTACHMENTS:

- Chapter 18, Article 6 Existing Flood Regulations
- Chapter 15 Proposed Flood Regulations
- Flood Information Rate Maps Panels 583, 584, 591, and 592

ARTICLE V

Fire Code

Sec. 18-5-10. Adoption.

Pursuant to Section 31-16-202, C.R.S., the International Fire Code, 2006 edition ("IFC"), published by the International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington DC 20001, is hereby adopted by reference, without amendment. The subject matter of the IFC includes comprehensive provisions and standards regulating the construction, alteration and use, height, area and maintenance of all public and private buildings or improvements for the purpose of protecting the public health, safety and welfare. (Ord. 846 §4, 1989; Ord. 93-O-15 §4, 1993; Ord. 96-O-4 §1, 1996; Ord. O-10 §11, 2001; Ord. O-4 §5, 2004; Ord. O-5 §7, 2007; Ord. O-8 §1, 2009)

Sec. 18-5-20. Copy on file.

One (1) copy of the IFC is on file in the office of the Town Clerk and is available for public inspection. (Ord. 846 §9, 1989; Ord. O-10 §13, 2001; Ord. O-5 §7, 2007; Ord. O-8 §1, 2009)

ARTICLE VI

Flood Control Plan

Sec. 18-6-10. Findings of fact.

- (a) The flood hazard areas of the Town are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief and impairment of the tax base.
- (b) These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities and, when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from damage also contribute to flood loss. (Ord. 794 §1.2, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-20. Purpose.

The purpose of this Article is to promote the public health, safety and general welfare by minimizing public and private losses due to flood conditions, ensuring that potential buyers are notified when a property is in an area of special flood hazard and ensuring that those who occupy areas of special flood hazard assume responsibility for their actions. (Ord. 794 §1.3, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-30. Methods of reducing flood losses.

This Article includes methods for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities:
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;
- (4) Controlling filling, grading, dredging and other development which may increase flood damage; and
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Ord. 794 §1.4, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-40. Definitions.

For purposes of this Article, the following terms shall have the following meanings:

Appeal means a request for a review of the Building Inspector's interpretation of any provisions of this Article or a request for a variance.

Area of special flood hazard means the land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year.

Base flood means the flood having a one-percent chance of being equaled or exceeded in any given year.

CBO means the Town's Chief Building Official or designee.

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

Existing mobile home park means a mobile home park for which the construction of facilities for servicing the lot on which the mobile homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads and the construction of streets) are completed before the effective date of the ordinance codified herein.

Expansion to an existing mobile home park means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed, including the installation of utilities, either final site grading or pouring of concrete pads or the construction of streets.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood insurance rate map (FIRM) means the official map on which the Federal Emergency Management Agency has delineated areas subject to flooding by the base flood, special flood hazards and the risk premium zones applicable to the Town, which may also include the delineation of water surface elevation and floodway boundaries.

Flood insurance study means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Boundary-Floodway Map and the water surface elevation of the base flood.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

Lowest floor means the lowest floor of the lowest enclosed area, including a basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this Article.

Mobile home means a structure, transportable in one (1) or more sections, which is eight (8) body feet or more in width and is thirty-two (32) body feet or more in length, and which is built on a permanent chassis and designed to be used as a dwelling without permanent foundation when connected to required utilities, and includes the plumbing, heating, air conditioning and electrical systems contained therein, but excluding factory-built homes, manufactured homes and recreational vehicles.

Mobile home lot or space means a designated portion of a mobile home park designed for the placement of a single mobile home and accessory structures for the exclusive use of the occupants and is exclusive of streets, walks and other common use areas in a mobile home park and exclusive of Town streets, alleys, walks or other public easements and adjacent private properties.

Mobile home park means a plot of land under single or unified ownership where two (2) or more mobile homes are located on pads on lots or spaces for permanent dwelling purposes.

New construction means structures for which the start of construction commenced on or after the effective date of this Article.

Recreational vehicle means a vehicle, that is: (1) built on a single chassis; (2) four hundred (400) square feet or less when measured at the largest horizontal projections; (3) designed to be self-propelled or permanently towable by a light-duty truck; and (4) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Start of construction includes substantial improvement and means the date the building permit was issued, provided that the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage

of excavation or the placement of a mobile home on a foundation. *Permanent construction* does not include land preparation such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the *actual start of construction* means the first alteration of any wall, ceiling, floor or other structural part of a building, regardless of whether that alteration affects the external dimensions of the building.

Structure means anything which is built or constructed upon the ground.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damage condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

Substantial improvement means any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either before the improvement or repair is started or, if the structure has been damaged and is being restored, before the damage occurred. A substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor or other part of the structure commences, whether or not that alteration affects the external dimensions of the structure or any act that requires a building permit. The term does not, however, include any project for improvement of a structure to comply with state, county or Town health, sanitary or safety code specifications which are solely necessary to assure safe conditions or any alteration of a structure listed on the National Register of Historic Places or the State Register of Historic Properties.

Variance means a grant of relief from the requirements of this Article which permits construction or development in a manner that would otherwise be prohibited by this Article. (Ord. 794 §2.0, 1989; Ord. O-13 §1, 2002; Ord. O-8 §1, 2009)

Sec. 18-6-50. Applicability.

- (a) This Article shall apply to all areas of special flood hazard within the jurisdiction of the Town.
- (b) The areas of special flood hazard identified by FEMA in a scientific and engineering report entitled, "The Flood Insurance Study, Boulder County, Colorado, and Incorporated Areas," dated October 4, 2002, with an accompanying FIRM, are hereby adopted by reference and declared to be a part of this Article. Copies of the Flood Insurance Study and FIRM are on file at the Town Hall, 124 East Coal Creek Drive, Superior, Colorado. (Ord. 794 §§3.1, 3.2, 1989; Ord. 95-O-8 §1, 1995; Ord. O-13 §2, 2002; Ord. O-8 §1, 2009)

Sec. 18-6-60. Compliance.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this Article and other applicable regulations. (Ord. 794 §3.3, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-70. Interpretation.

- (a) This Article is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Article and another Article, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
 - (b) In interpreting and applying this Article, all provisions shall be:
 - (1) Considered minimum requirements;
 - (2) Liberally construed in favor of the governing body; and
 - (3) Deemed neither to limit nor repeal any other powers granted under state law. (Ord. 794 §§3.4, 3.5, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-80. Disclaimer of liability.

The degree of flood protection required by this Article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This Article shall not create liability on the part of the Town, any officer or employee thereof or FEMA for any flood damages that result from reliance on this Article or any administrative decision lawfully made thereunder. (Ord. 794 §3.6, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-90. Development permit.

A development permit shall be obtained before construction or development begins within any area of special flood hazard. Application for a development permit shall be made on forms furnished by the Building Inspector and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing. Where base flood elevations are utilized, all new construction, substantial improvements and other development shall comply with Section 18-6-100 below. Specifically, the following information is required:

- (1) Elevation in relation to mean sea level of the lowest floor (including basement) of all structures;
 - (2) Elevation in relation to mean sea level to which any structure has been floodproofed;
- (3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 18-6-130 of this Article; and
- (4) A description of the extent to which any watercourse will be altered or relocated as a result of proposed development. (Ord. 794 §4.1, 1989; Ord. O-13 §3, 2002; Ord. O-8 §1, 2009)

Sec. 18-6-100. Duties and responsibilities of Chief Building Official.

- (a) The CBO is hereby appointed to administer and implement this Article by granting or denying development permit applications in accordance with its provisions.
 - (b) Duties of the CBO shall include, but not be limited to:
 - (1) Permit review.
 - a. Review all development permits to determine that the permit requirements of this Article have been satisfied.
 - b. Review all development permits to determine that all necessary permits have been obtained from federal, state or local governmental agencies from which prior approval is required.
 - c. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Paragraph 18-6-150(1) of this Article are met.
 - (2) Use of other base flood data. When base flood elevation data has not been provided in accordance with this Article, the CBO shall obtain, review and reasonably utilize any base flood elevation and floodway data available from any source. Where base flood elevation data is utilized, all new construction, substantial improvements or other development in Zone A are administered in accordance with the applicable provisions of this Article.
 - (3) Information to be obtained and maintained.
 - a. Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures and whether or not the structure contains a basement.
 - b. For all new or substantially improved floodproofed structures:
 - 1. Verify and record the actual elevation (in relation to mean sea level) to which the structure has been floodproofed.
 - 2. Maintain floodproofing certifications.
 - c. Maintain for public inspection all records pertaining to the provisions of this Article.
 - (4) Alteration of watercourses.
 - a. Notify adjacent communities and the Colorado Water Conservation Board prior to any alteration or relocation of a watercourse and submit evidence of such notification to FEMA.
 - b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

(5) Interpretation of FIRM boundaries. Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards. (Ord. 794 §4.3, 1989; Ord. O-13 §4, 2002; Ord. O-8 §1, 2009)

Sec. 18-6-110. Variance procedure.

(a) Appeal board.

- (1) The Board of Adjustment shall hear and decide appeals and requests for variances from the requirements of this Article. The Board of Adjustment shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Building Inspector in the enforcement or administration of this Article.
- (2) Those aggrieved by the decision of the Board of Adjustment may appeal such decision to the Boulder County District Court as provided by law.
- (3) In passing upon such applications, the Board of Adjustment shall consider all technical evaluations, all relevant factors, standards specified in this Article and:
 - a. The danger that materials may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners;
 - d. The importance of the services provided by the proposed facility to the community;
 - e. The necessity to the facility of a waterfront location, where applicable;
 - f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - g. The compatibility of the proposed use with the existing and anticipated development;
 - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

- (4) Upon consideration of the factors of Paragraph (3) above and the purposes of this Article, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of the Article.
- (5) The CBO shall maintain the records of all appeal actions, including technical information, and report any variances to FEMA.

(b) Criteria for variances.

- (1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot on one-half (½) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base level, provided that Subparagraphs (a)(3)a. through k. hereof have been fully considered. As the lot size increases beyond the one-half (½) acre, the technical justifications required for issuing the variance increases.
- (2) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Register of Historic Properties without regard to the procedures set forth in the remainder of this Section.
- (3) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (5) Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
- (6) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk from the reduced lowest floor elevation. (Ord. 794 §4.4, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-120. General standards.

In all areas of special flood hazard, the following standards are required:

(1) Anchoring.

- a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure and capable of resisting the hydrostatic and hydrodynamic loads.
- b. All mobile homes must be elevated and anchored to resist flotation, collapse or lateral movement and capable of resisting the hydrostatic and hydrodynamic loads. Methods of anchoring may include, but are not limited to, over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces. Specific requirements may include:
 - 1. Over-the-top ties at each of the four (4) corners of the mobile home, with two (2) additional ties per side at intermediate locations, with mobile homes less than fifty (50) feet long requiring one (1) additional tie per side;
 - 2. Frame ties at each corner of the mobile home with five (5) additional ties per side at intermediate points, with mobile homes less than fifty (50) feet long requiring four (4) additional ties per side;
 - 3. A requirement that all components of the anchoring system be capable of carrying a force of four thousand eight hundred (4,800) pounds; and
 - 4. A requirement that any additions to the mobile home be similarly anchored.
- (2) Construction materials and methods.
- a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- c. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(3) Utilities.

- a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
- c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- (4) Subdivision proposals. All subdivision proposals shall:

- a. Be consistent with the need to minimize flood damage;
- b. Locate and construct public utilities and facilities such as sewer, gas, electrical and water systems to minimize flood damage;
 - c. Provide adequate drainage to reduce exposure to flood damage; and
- d. Provide base flood elevation data for development which contains at least fifty (50) lots or five (5) acres, whichever is less. (Ord. 794 §5.1, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-130. Specific standards.

In areas of special flood hazard where base flood elevation data has been provided, the following shall apply:

- (1) Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to one (1) foot above the base flood elevation;
- (2) Nonresidential construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to one (1) foot above the base flood elevation or, together with attendant utility and sanitary facilities, shall:
 - a. Be floodproofed so that below the base flood elevation the structure is watertight to an elevation of one (1) foot above the base flood elevation with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this Paragraph.
- (3) Openings in enclosures below the lowest floor. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

- (4) Mobile homes.
 - a. Mobile homes shall be anchored in accordance with Paragraph 18-6-120(1) above.
- b. All mobile homes or those to be substantially improved shall be elevated on a permanent foundation such that the lowest floor of the mobile home is one (1) foot above the base flood elevation and is securely anchored to an adequately anchored foundation system. This Subparagraph applies to mobile homes that are to be placed or substantially improved in an expansion to an existing mobile home park. This Subparagraph does not apply to mobile homes that are to be placed or substantially improved in an existing mobile home park except where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds fifty percent (50%) of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced.
- (5) Recreational vehicles. Recreational vehicles shall:
 - a. Be on the site for fewer than one hundred eighty (180) consecutive days;
 - b. Be fully licensed and ready for highway use; or
- c. Meet the permit requirements and elevation and anchoring requirements for mobile homes. (Ord. 794 §5.2, 1989; Ord. O-12 §21, 2000; Ord. O-13 §5, 2002; Ord. O-8 §1, 2009)

Sec. 18-6-140. Floodways.

Certain areas located within areas of special flood hazard are designated as floodways. Because a floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following shall apply:

- (1) Encroachments, including fill, new construction, substantial improvements and other developments, are prohibited unless certification by a registered professional engineer or architect is provided demonstrating that such encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) If the conditions contained in Paragraph (1) hereof are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 18-6-120 and 18-6-130 above. (Ord. 794 §5.3, 1989; Ord. O-8 §1, 2009)

Sec. 18-6-150. Below-grade residential crawlspace construction.

New construction and substantial improvement of any below-grade crawlspace shall:

- (1) Have the interior grade elevation, that is below base flood elevation, no lower than two (2) feet below the lowest adjacent grade;
- (2) Have the height of the below-grade crawlspace measured from the interior grade of the crawlspace to the top of the foundation wall, not to exceed four (4) feet at any point;

- (3) Have an adequate drainage system that allows floodwater to drain from the interior area of the crawlspace following a flood; and
- (4) Comply with provisions of this Article regarding construction materials and methods and Paragraph 18-6-130(3). (Ord. O-13 §6, 2002; Ord. O-8 §1, 2009)

ARTICLE VII

Fuel Gas Code

Sec. 18-7-10. Adoption.

Pursuant to Section 31-16-202, C.R.S., the International Fuel Gas Code, 2006 edition ("IFGC"), published by the International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington DC 20001, is hereby adopted by reference. The subject matter of the IFGC establishes minimum regulations for fuel gas systems and gas-fired appliances for the purpose of protecting the public health, safety and welfare. (Ord. O-10 §14, 2001; Ord. O-4 §6, 2004; Ord. O-5 §8, 2007; Ord. O-8 §1, 2009)

Sec. 18-7-20. Amendments.

The IFGC is hereby amended as follows:

- (1) Replace Section 106.4.3 with the following:
 - "See Section 105.5 of the IBC, as amended."
- (2) Add the following to Section 106.5.2:
 - "See Chapter 4 of the Superior Municipal Code for the permit fee schedule."
- (3) Replace Section 106.5.3 with the following:
 - "The building official is authorized to establish a refund policy."
- (4) Replace the last part of the first sentence of Section 108.4 beginning with "guilty of a ..." with the following: "subject to penalties as prescribed by law."
 - (5) Delete the last sentence of Section 108.5.
 - (6) Delete Section 109.2 in its entirety.
 - (7) Section 609 is amended to read as follows:
 - "609.1 General. Floor furnaces are prohibited in any construction."
 - (8) Section 621 is amended to read as follows:

TOWN OF SUPERIOR ORDINANCE NO. O-____ SERIES 2012

AN ORDINANCE OF THE BOARD OF TRUSTEES OF THE TOWN OF SUPERIOR REPEALING CHAPTER 18, ARTICLE VI OF THE SUPERIOR MUNICIPAL CODE, AND ADOPTING A NEW CHAPTER 15 OF THE SUPERIOR MUNICIPAL CODE, RELATING TO FLOOD REGULATIONS

WHEREAS, the Federal Emergency Management Agency ("FEMA") recently updated the floodplain maps for Boulder County; and

WHEREAS, the State has recommended that the Town adopt new flood regulations in light of the new FEMA floodplain maps.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF SUPERIOR, COLORADO:

- <u>Section 1</u>. Chapter 18, Article VI of the Superior Municipal Code is hereby repealed in its entirety.
- <u>Section 2</u>. The Superior Municipal Code is hereby amended by the addition of a new Chapter 15, entitled Flood Regulations, in the form attached hereto as $\mathbf{Exhibit}$ \mathbf{A} and incorporated herein by this reference.
- <u>Section 3.</u> <u>Severability</u>. If any article, section, paragraph, sentence, clause, or phrase of this Ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of Trustees hereby declares that it would have passed this Ordinance and each part or parts hereof irrespective of the fact that any one or part or parts be declared unconstitutional or invalid.
- $\underline{\text{Section 4}}$. Safety. This Ordinance is deemed necessary for the protection of the health, welfare and safety of the community.

day of	•	 	ORDERED	PORTISHED	this
		——— Andr	ew Muckle	, Mayor	

ATTEST:

Phyllis L. Hardin, Town Clerk-Treasurer

Chapter 15

FLOOD REGULATIONS

Article I

GENERAL PROVISIONS

Sec. 15-1-10. Purpose and jurisdiction.

- (a) Purpose. It is the purpose of this Chapter to promote the public health, safety by provisions designed to:
 - (1) Protect human life and health;
 - (2) Minimize expenditure of public funds for costly flood control projects;
 - (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 - (4) Minimize prolonged business interruptions caused by flooding;
 - (5) Minimize damage to critical facilities, infrastructure and other public facilities such as water, sewer and gas mains; electric and communications stations; and streets and bridges located in floodplains;
 - (6) Maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas; and
 - (7) Insure that potential buyers are notified that property is located in a flood hazard area.
- (b) Jurisdiction. Pursuant to C.R.S. Title 29, Article 20, the State has delegated to local governments the responsibility to adopt regulations designed to minimize flood losses.

Sec. 15-1-20. Applicability.

This Chapter shall apply to all SFHA and areas removed from the floodplain by the issuance of a LOMR-F in the Town.

Sec. 15-1-30. Definitions.

For purposes of this Chapter, the following terms shall have the following meanings:

100-year flood means a flood having a recurrence interval that has a one percent (1%) chance of being equaled or exceeded during any given year.

100-year floodplain means the area of land susceptible to being inundated as a result of the occurrence of a 100-year flood.

500-year flood means a flood having a recurrence interval that has a 0.2 percent chance of being equaled or exceeded during any given year.

500-year floodplain means the area of land susceptible to being inundated as a result of the occurrence of a 500-year flood.

Actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation, or for a substantial improvement, the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Addition means an activity that expands the enclosed footprint or increases the square footage of an existing structure.

Alluvial fan flooding means a fan-shaped sediment deposit formed by a stream that flows from a steep mountain valley or gorge onto a plain or the junction of a tributary stream with the main stream, containing active stream channels and boulder bars, and recently abandoned channels, and predominantly formed by alluvial deposits and are modified by infrequent sheet flood, channel avulsions and other stream processes.

Area of shallow flooding means a designated Zone AO or AH on a FIRM with a one percent (1%) chance or greater annual chance of flooding to an average depth of one to three feet (3') where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident.

Base Flood Elevation (BFE) means the elevation shown on a FIRM for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent (1%) chance of equaling or exceeding that level in any given year.

Basement means an area of a building having its floor below ground level on all sides.

Channel means the physical confine of stream or waterway consisting of a bed and stream banks, existing in a variety of geometries.

Channelization means the artificial creation, enlargement or realignment of a stream channel.

CWCB means Colorado Water Conservation Board.

Conditional Letter of Map Revision (CLOMR) means FEMA's comment on a proposed project, which does not revise an effective floodplain map, that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodplain.

Critical facility means a structure or related infrastructure, but not the land on which it is situated, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the Town at any time before, during and after a flood.

Development means a man-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

DFIRM database means the database containing data and analyses that accompanies DFIRMs.

Digital Flood Insurance Rate Map (DFIRM) means the FEMA digital floodplain map, which serve as regulatory floodplain maps for insurance and floodplain management purposes.

Elevated building means a non-basement building built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the flow of the water and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood; and in the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the Town.

FEMA means the Federal Emergency Management Agency.

Flood means a temporary condition of partial or complete inundation of normally dry land areas from: the overflow of water from channels and reservoir spillways; the unusual and rapid accumulation or runoff of surface waters from any source; or mudslides or mudflows that occur from excess surface water that is combined with mud or other debris that is sufficiently fluid so as to flow over the surface of normally dry land areas, such as earth carried by a current of water and deposited along the path of the current.

Flood Insurance Rate Map (FIRM) means an official map on which FEMA has delineated both the SFHA and the risk premium zones.

Flood Insurance Study (FIS) means the official report provided by FEMA containing the FIRM as well as flood profiles for studied flooding sources that can be used to determine the BFE for some areas.

Floodplain means a land area susceptible to being inundated as the result of a flood, including the area of land over which floodwater would flow from the spillway of a reservoir.

Floodplain Administrator means the Town Manager or designee.

Floodplain development permit means a permit required before construction or development begins.

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Flood control structure means a physical structure designed and built expressly or partially for the purpose of reducing, redirecting, or guiding flood flows along a particular waterway, constructed in conformance with sound engineering standards.

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway means the channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height, using the Colorado statewide standard for the designated height for all newly studied reaches, which is six inches (6"), provided that LOMRs to existing floodway delineations may continue to use the floodway criteria in place at the time of the existing floodway delineation.

Freeboard means the vertical distance in feet above a predicted water surface elevation intended to provide a margin of safety to compensate for unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood such as debris blockage of bridge openings and the increased runoff due to urbanization of the watershed.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, including docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but excluding long-term storage or related manufacturing facilities.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure means a structure that is: listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: by an approved state program as determined by the Secretary of the Interior; or directly by the Secretary of the Interior in states without approved programs.

Letter of Map Revision ("LOMR") means FEMA's official revision of an effective FIRM, or FBFM, or both.

Letter of Map Revision Based on Fill ("LOMR-F") means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway.

Lowest floor means the lowest floor of the lowest enclosed area of a building, including the basement used for living purposes which includes working, storage, sleeping, cooking and eating, or recreation or any combination thereof, including any floor that could be converted to such a use such as a basement or crawl space, but excluding an unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of § 60.3 of the NFIP.

Manufactured home means a structure transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities.

Manufactured home park or subdivision means a parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

Mean sea level means, for purposes of the NFIP, the North American Vertical Datum (NAVD) of 1988 or other datum, to which BFEs shown on a FIRM are referenced.

Material Safety Data Sheet ("MSDS") means a form with data regarding the properties of a particular substance, intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner, and includes information such as physical data, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill-handling procedures.

National Flood Insurance Program ("NFIP") means FEMA's program of flood insurance coverage and floodplain management administered in conjunction with the Robert T. Stafford Relief and Emergency Assistance Act.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of this Chapter.

No-rise certification means a record of the results of an engineering analysis conducted to determine whether a project will increase flood heights in a floodway, which must be supported by technical data and signed by a registered Colorado Professional Engineer, with supporting technical data based on the standard step-backwater computer model used to develop the 100-year floodway shown on the FIRM or FBFM.

Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Physical Map Revision ("PMR") means FEMA's action whereby one or more map panels are physically revised and republished, to change flood risk zones, floodplain or floodway delineations, flood elevations, or planimetric features.

Recreational vehicle means a vehicle that is: built on a single chassis; 400 square feet or less when measured at the largest horizontal projections; designed to be self-propelled or permanently towable by a light duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Special Flood Hazard Area ("SFHA") means the land in the floodplain in the Town subject to a one percent (1%) or greater chance of flooding in any given year.

Start of construction means the date a building permit was issued, including substantial improvements, if the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days of the permit date.

Structure means a walled and roofed building, including a gas or liquid storage tank, which is principally above ground, as well as a manufactured home.

Substantial damage means damage sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty percent (50%) of the market value of the structure immediately preceding the damage.

Substantial improvement means a reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure immediately preceding the improvement with the value of the structure being determined by the Town, and including structures which have incurred substantial damage, regardless of the actual repair work performed, but excluding: any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions or any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

Threshold Planning Quality ("TPQ") means a quantity designated for each chemical on the list of extremely hazardous substances that triggers notification by facilities to the State that such facilities are subject to emergency planning requirements.

Water surface elevation means the height, in relation to the NAVD or other datum, where specified, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Sec. 15-1-40. Interpretation.

This Chapter meets the minimum requirements as set forth by the CWCB and the NFIP. In the application of this Chapter, all provisions shall be: considered as minimum requirements; liberally construed in favor of the Town; and deemed neither to limit nor repeal any other powers granted under State or federal law.

Sec. 15-1-50. Violation; penalty.

- (a) It is unlawful to construct, locate, extend, convert or alter any land or structure in the Town except in compliance with this Chapter.
 - (b) Violations of this Chapter shall be punished as provided in Chapter 1 of this Code.

Article II

ADMINISTRATION

Sec. 15-2-10. Establishment of SFHAs.

The SFHAs identified by FEMA in a scientific and engineering report entitled, "The Flood Insurance Study for the Town of Superior," dated December 18, 2012, with accompanying FIRMs or FBFMs and any revisions thereto are hereby adopted by reference. The Floodplain Administrator shall keep a copy of the FIS, DFIRMs, FIRMs and FBFMs on file and available for public inspection.

Sec. 15-2-20. Permit required.

No structure or land shall be located, altered, or have its use changed within the SFHA without a floodplain development permit in compliance with this Chapter.

Sec. 15-2-30. Floodplain Administrator.

The Floodplain Administrator shall:

- (1) Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance, including the actual elevation, in relation to mean sea level, of the lowest floor of all new or substantially improved structures and any floodproofing certificate required by this Chapter.
 - (2) Review, approve, or deny all applications for Floodplain Development Permits.
- (3) Review Floodplain Development Permit applications to determine whether a proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
- (4) Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies, including § 404 of

the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1334, for which prior approval is required.

- (5) Inspect all development at appropriate times during the period of construction to ensure compliance with all provisions of this ordinance, including proper elevation of the structure.
- (6) Where interpretation is needed as to the exact location of the boundaries of the SFHA, the Floodplain Administrator shall make the necessary interpretation.
- (7) When BFE data has not been provided in accordance with this Chapter, the Floodplain Administrator shall obtain, review and reasonably utilize any BFE data and floodway data available from a Federal, State, or other source.
- (8) For waterways with BFEs for which a regulatory Floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one-half foot at any point within the Town.
- (9) Pursuant to 44 CFR § 65.12 of the NFIP, the Town may approve certain development in Zones A1-30, AE, AH, on the FIRM which increases the water surface elevation of the base flood by more than one-half foot, provided that the Town first applies for a CLMP, fulfills the requirements of § 65.12 and receives FEMA approval.
- (10) In riverine situations, notify adjacent communities and the CWCB, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to FEMA.
- (11) Ensure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

Sec. 15-2-40. Permit procedures.

- (a) An application for a floodplain development permit shall be submitted to the Floodplain Administrator and shall include all of the following:
 - (1) Plans drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to SFHA.
 - (2) Elevation (in relation to mean sea level), of the lowest floor of all new and substantially improved structures.
 - (3) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed.

- (4) A certificate from a registered Colorado Professional Engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria of Section 15-3-20(2).
- (5) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
- (b) The Floodplain Administrator shall consider the following in determining whether to issue a floodplain development permit:
 - (1) The danger to life and property due to flooding or erosion damage;
 - (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (3) The danger that materials may be swept onto other lands to the injury of others;
 - (4) The compatibility of the proposed use with existing and anticipated development and the Comprehensive Plan;
 - (5) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
 - (7) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
 - (8) The necessity to the facility of a waterfront location, where applicable; and
 - (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use

Sec. 15-2-50. Variance procedures.

- (a) The Board of Trustees shall hear and decide on applications for variances from the requirements of this Chapter, when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this Chapter.
- (b) Any person or persons aggrieved by the decision of the Board of Trustees may appeal such decision in the courts of competent jurisdiction.
- (c) The Floodplain Administrator shall maintain a record of all variances and shall report variances to FEMA upon request.
- (d) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued

designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

- (e) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, if the relevant criteria in Section 15-2-40(b) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (f) The Board of Trustees may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Chapter.
 - (g) Criteria. Variances shall only be issued if the following criteria are satisfied:
 - (1) The variance is the minimum necessary, considering the flood hazard, to afford relief;
 - (2) Failure to grant the variance would result in exceptional hardship to the applicant;
 - (3) The grant of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;
 - (4) The variance is not within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (h) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the Base Flood Elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (i) Variances may be issued by a the Town for new construction and substantial improvements and for other development necessary for the conduct of a Functionally Dependent Use if the criteria outlined in Section 15-2-50(a)-(e) are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

Article III

FLOOD HAZARD REDUCTION

Sec. 15-3-10. General standards.

In an SFHA, the following standards shall apply:

(1) New construction and substantial improvements shall be designed and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

- (2) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage, with materials resistant to flood damage, and with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (3) Manufactured homes shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
- (4) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (5) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters.
- (6) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Sec. 15-3-20. Specific standards.

In an SFHA where BFE data has been provided, the following standards shall apply:

- (1) Residential structures. New construction and substantial improvement of any residential structure shall have the lowest floor elevated to one foot (1') above the base flood elevation. Upon completion of the structure, the elevation of the lowest floor shall be certified to the Floodplain Administrator by a registered Colorado Professional Engineer, architect, or land surveyor.
- (2) Nonresidential structures. With the exception of Critical Facilities, new construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor elevated to one foot above the base flood elevation or, together with attendant utility and sanitary facilities, be designed so that at one foot above the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered Colorado Professional Engineer or architect shall develop and review structural design, specifications, and plans for the construction, and shall certify to the Floodplain Administrator that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection.
- (3) Enclosures. New construction and substantial improvements with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding shall be designed

to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs shall be certified by a registered Colorado Professional Engineer or architect to meet or exceed the following minimum criteria:

- a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
- b. The bottom of all openings shall be no higher than one foot above grade and
- c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (4) Manufactured homes. Manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to one foot above the BFE and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. Manufactured homes placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH and AE on the FIRM that are not subject to the provisions of the above paragraph, shall be elevated so that either:
 - a. The lowest floor of the manufactured home is one foot above the base flood elevation, or
 - b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- (5) Recreational vehicles. Recreational vehicles placed on sites within Zones A1-30, AH, and AE on the FIRM shall:
 - a. Be on the site for fewer than one hundred eighty (180) consecutive days;
 - b. Be fully licensed and ready for highway use; or
 - c. Meet the permit requirements of this Chapter and the elevation and anchoring requirements for manufactured homes.

Sec. 15-3-30. Standards for AO/AH zones.

The following standards shall apply to AO/AH zones:

- (1) Residential construction. New construction and substantial Improvements of residential structures must have the lowest floor, including the basement, elevated above the highest adjacent grade at least one foot above the depth number specified in feet on the FIRM, or at least three feet (3') if no depth number is specified. Upon completion of the structure, the elevation of the lowest floor shall be certified by a registered Colorado Professional Engineer, architect, or land surveyor. Such certification shall be submitted to the Floodplain Administrator.
- (2) Nonresidential construction. With the exception of Critical Facilities, new construction and Substantial Improvements of non-residential structures shall have the lowest floor, including the basement, elevated above the highest adjacent grade at least one foot above the depth number specified in feet on the FIRM, or at least three feet (3') if no depth number is specified, or together with attendant utility and sanitary facilities be designed so that the structure is watertight to at least one foot above the base flood level with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy. A registered Colorado Professional Engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this Chapter are satisfied. Adequate drainage paths around structures on slopes are required to guide flood waters around and away from proposed structures.

Sec. 15-3-40. Floodways.

- (a) Encroachments in floodways are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed by a licensed Colorado Professional Engineer and in accordance with standard engineering practice that the proposed encroachment would not result in any increase (requires a No-Rise Certification) in flood levels within the Town during the occurrence of the base flood discharge.
- (b) If subsection (a) hereof is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this Chapter.
- (c) Pursuant to § 65.12 of the NFIP, the Town may permit encroachments within the adopted regulatory floodway that would result in an increase in BFEs, provided that the Town first applies for a CLOMR and floodway revision through FEMA.

Sect. 15-3-50. Alteration of a watercourse.

For a proposed development that alters a watercourse in a SFHA, the following standards shall apply:

(1) Channelization and flow diversion projects shall appropriately consider issues of sediment transport, erosion, deposition, and channel migration and properly mitigate potential problems through the project as well as upstream and downstream of any improvement activity. A detailed analysis of sediment transport and overall channel stability should be considered, when appropriate, to assist in determining the most appropriate design.

- (2) Channelization and flow diversion projects shall evaluate the residual 100-year floodplain.
- (3) Any channelization or other stream alteration activity proposed by a project proponent must be evaluated for its impact on the floodplain and be in compliance with all applicable federal, State and Town floodplain rules and regulations.
- (4) Stream alteration activity shall be designed and sealed by a registered Colorado Professional Engineer or Certified Professional Hydrologist.
- (5) Activities within the floodplain shall meet all applicable federal, State and Town floodplain rules and regulations.
- (6) Within the floodway, stream alteration activities shall not be constructed unless the applicant demonstrates through a floodway analysis and report, sealed by a registered Colorado Professional Engineer, that there is not more than a 0.00-foot rise in the proposed conditions compared to existing conditions floodway resulting from the project, otherwise known as a No-Rise Certification, unless the Town first applies for a CLOMR and floodway revision in accordance with Section 15-3-40.
- (7) Maintenance shall be required for any altered or relocated portions of watercourses so that the flood-carrying capacity is not diminished.

Sec. 15-3-60. Properties removed from the floodplain by fill.

A Floodplain Development Permit shall not be issued for the construction of a new structure or addition to an existing structure on a property removed from the floodplain by the issuance of a LOMR-F, with a lowest floor elevation placed below the BFE with one foot of freeboard that existed prior to the placement of fill.

Sec. 15-3-70. Standards for new subdivisions.

- (a) New subdivisions shall be reasonably safe from flooding. If a subdivision or other development proposal is in a flood-prone area, the proposal shall minimize flood damage.
- (b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Floodplain Development Permit requirements of Sections 15-2-20, 15-2-40 and Article III of this Chapter.
- (c) BFE data shall be generated for subdivisions greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided by this Chapter.
- (d) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

Sec. 15-3-80. Standards for critical facilities.

- (a) Classification. Critical Facilities are classified under the following categories:
 - (1) Essential services.
 - a. Essential services include:
 - 1. Public safety (police stations, fire and rescue stations, emergency vehicle and equipment storage, and, emergency operation centers);
 - 2. Emergency medical (hospitals, ambulance service centers, urgent care centers having emergency treatment functions, and non-ambulatory surgical structures but excluding clinics, doctors offices, and non-urgent care medical structures that do not provide these functions);
 - 3. Designated emergency shelters;
 - 4. Communications (main hubs for telephone, broadcasting equipment for cable systems, satellite dish systems, cellular systems, television, radio, and other emergency warning systems, but excluding towers, poles, lines, cables, and conduits);
 - 5. Public utility plant facilities for generation and distribution, including hubs, treatment plants, substations and pumping stations for water, power and gas, but not including towers, poles, power lines, buried pipelines, transmission lines, distribution lines, and service lines; and
 - 6. Airports, helicopter pads and structures serving emergency functions, and associated infrastructure, including aviation control towers, air traffic control centers, and emergency equipment aircraft hangars.
 - b. Exemptions. Specific exemptions to this category include wastewater treatment plants, non-potable water treatment and distribution systems, and hydroelectric power generating plants and related appurtenances. Public utility plant facilities may be exempted if it can be demonstrated to the satisfaction of the Town that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same utility or available through an intergovernmental agreement or other contract) and connected, the alternative facilities are either located outside of the 100-year floodplain or are compliant with this Chapter, and an operations plan is in effect that states how redundant systems will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the Town upon request.
 - (2) Hazardous materials facilities.
 - a. Hazardous materials facilities include:

- 1. Chemical and pharmaceutical plants;
- 2. Laboratories containing highly volatile, flammable, explosive, toxic or water-reactive materials;
- 3. Refineries;
- 4. Hazardous waste storage and disposal sites; and
- 5. Above ground gasoline or propane storage or sales centers.
- b. Facilities shall be determined to be Critical Facilities if they produce or store materials in excess of threshold limits. If the owner of a facility is required by the Occupational Safety and Health Administration to keep a MSDS on file for any chemicals stored or used in the work place, and the chemical(s) is stored in quantities equal to or greater than the TPQ for that chemical, then that facility shall be considered to be a Critical Facility. The TPQ for these chemicals is: either 500 pounds or the TPQ listed (whichever is lower) for the 356 chemicals listed under 40 C.F.R. § 302, also known as Extremely Hazardous Substances; or 10,000 pounds for any other chemical. 40 C.F.R. § 302 and 29 C.F.R. § 1910 are incorporated herein by reference and include the regulations in existence at the time of the promulgation this Chapter, but exclude later amendments to or editions of the regulations.
- c. Exemptions. Specific exemptions to this category include the following, unless the structures also function as critical facilities:
 - Finished consumer products within retail centers and households containing hazardous materials intended for household use, and agricultural products intended for agricultural use.
 - 2. Buildings and other structures containing hazardous materials for which it can be demonstrated to the satisfaction of the Town by hazard assessment and certification by a qualified professional that a release of the subject hazardous material does not pose a major threat to the public.
 - 3. Pharmaceutical sales, use, storage, and distribution centers that do not manufacture pharmaceutical products.
- (3) At-risk population facilities. At-risk population facilities include: nursing homes; day care and assisted living facilities serving 12 or more individuals; and public and private schools serving 12 or more children).
 - (4) Facilities vital to restoring normal services.
 - a. Facilities vital to restoring normal services include essential government operations; and dormitories, offices and classrooms for public colleges and universities.

- b. Exemptions. These facilities may be exempted if it is demonstrated to the Town that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same entity or available through an intergovernmental agreement or other contract), the alternative facilities are either located outside of the 100-year floodplain or are compliant with this ordinance, and an operations plan is in effect that states how redundant facilities will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the Town on an as-needed basis upon request.
- (b) Protection. All new and substantially improved Critical Facilities and new additions to critical facilities located within the SFHA shall be protected by one of the following: location outside the SFHA; or elevation or floodproofing of the structure to at least two feet (2') above the BFE.
- (c) Ingress and egress. New critical facilities shall, when practicable as determined by the Town, have continuous non-inundated ingress and egress for evacuation and emergency services during a 100-year flood event.

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services NOAA, N/NGS12 National Geodetic Survey SSMC-3, #9202 1315 East-West Highway Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided by the FEMA Map Service Centerand the Boulder Area Spatial Data Cooperative (BASIC). Additional input was provided by the Town of Erie and the City of Longmont. These data are current as of

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

Boulder County Vertical Datum Offset Table

Vertical Datum
Flooding Source

Coal Creek

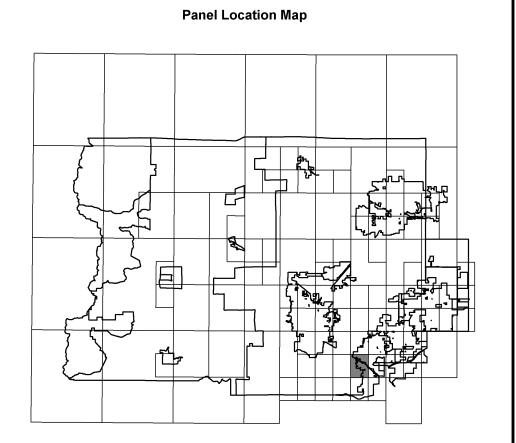
Vertical Datum
Flooding Source

Offset (ft)

Offset (ft)

Offset (ft)

Example: To convert Coal Creek elevations to NAVD 88, 3.3 feet were added to the NGVD 29 elevations.

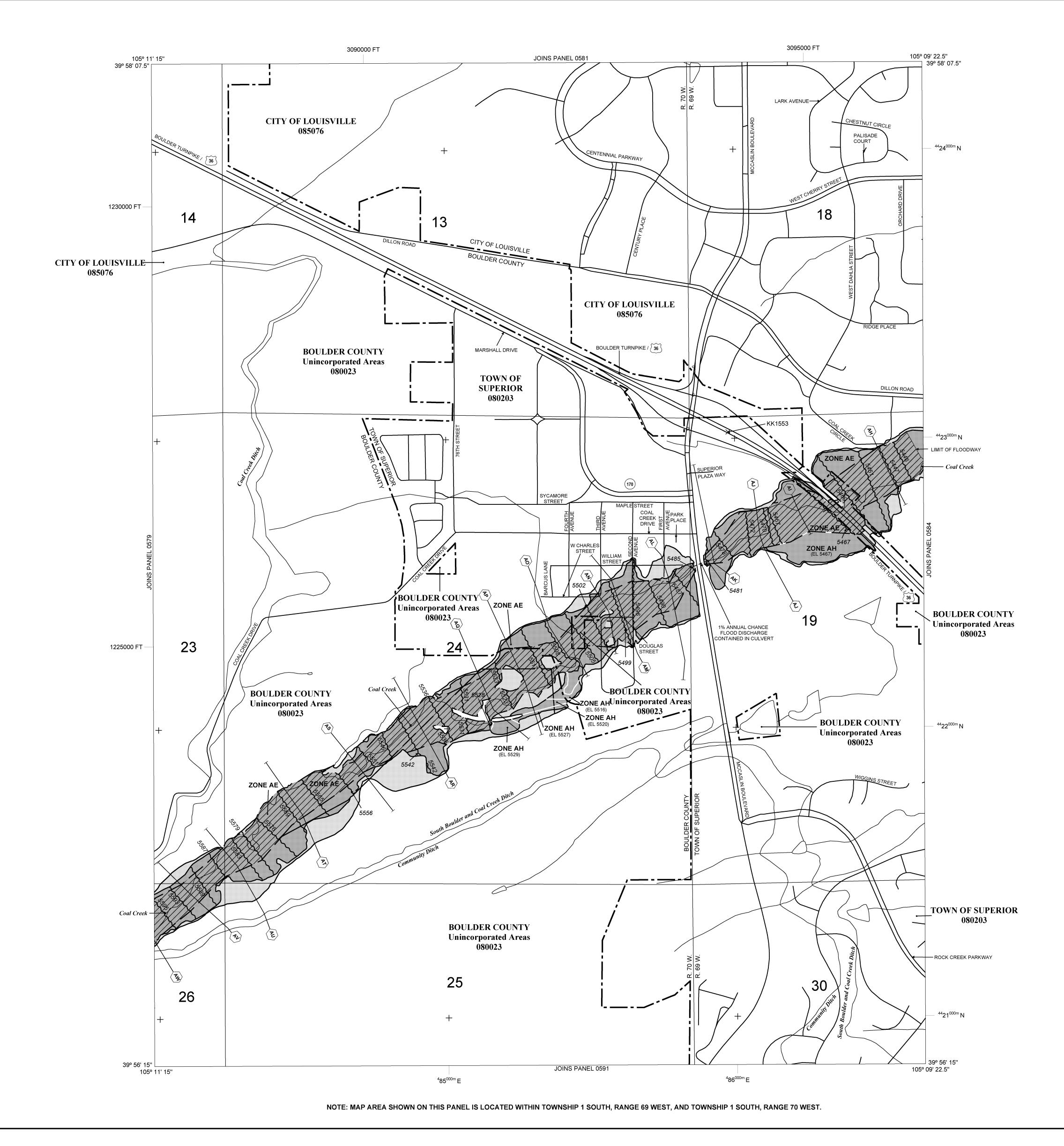


This digital Flood Insurance Rate map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner agreements with FEMA to produce this digital FIRM.



Additional Flood Hazard Information and resources are available from local communities, the Colorado Water Conservation Board, and the Urban Drainage and Flood Control District.





LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone

protection from the 1% annual chance or greater flood.

Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

AR indicates that the former flood control system is being restored to provide

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in

OTHER FLOOD AREAS

Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

flood heights.

ZONE X

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary
Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

Sase Flood Elevation line and value; elevation in feet*

(EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A Cross section line

<u>...</u> ------

3180000 FT

23 - - - - - - - - - - - Transect line

45° 02' 08", 93° 02' 12" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

⁴⁹89^{000m} N 1000-meter Universal Transverse Mercator grid values, zone 13

Lambert Conformal Conic projection

DX5510

Bench mark (see explanation in Notes to Users section of this FIRM

5000-foot ticks: Colorado State Plane North Zone (FIPS Zone 0501),

River Mile MAP REPOSITORY

Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP

June 2, 1995

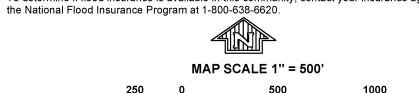
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL May 6, 1996 - to incorporate previously issued Letters of Map Revision; to add roads and road names; and to update corporate limits.

October 4, 2002 - to change base flood elevations; to change special flood hazard areas; to change zone designations; to update roads and road names; to reflect updated topographic

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For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call



][

PANEL 0583J

FIRM

FLOOD INSURANCE RATE MAP
BOULDER COUNTY,
COLORADO

AND INCORPORATED AREAS

PANEL 583 OF 615

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

AINS: MUNITY NUMBER PANEL

BOULDER COUNTY 080023 0583 LOUISVILLE, TOWN OF 085076 0583 SUPERIOR, TOWN OF 080203 0583

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be

used on insurance applications for the subject



MAP REVISED DECEMBER 18, 2012

MAP NUMBER

08013C0583J

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The horizontal datum was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following

NGS Information Services NOAA, N/NGS12 National Geodetic Survey SSMC-3, #9202 1315 East-West Highway Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713- 3242, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided by the FEMA Map Service Centerand the Boulder Area Spatial Data Cooperative (BASIC). Additional input was provided by the Town of Erie and the City of Longmont. These data are current as of

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Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

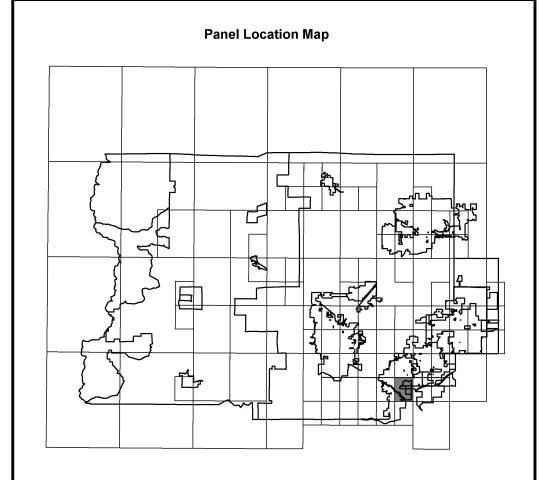
Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community

For information on available products associated with this FIRM visit the Map Service Center (MSC) website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

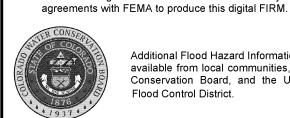
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Boulder County Vertical Datum Offset Table						
Flooding Source	Vertical Datum Offset (ft)	Flooding Source	Vertical Datum Offset (ft			
Coal Creek	3.3	Rock Creek	3.2			

Example: To convert Coal Creek elevations to NAVD 88, 3.3 feet were added to the NGVD 29 elevations.

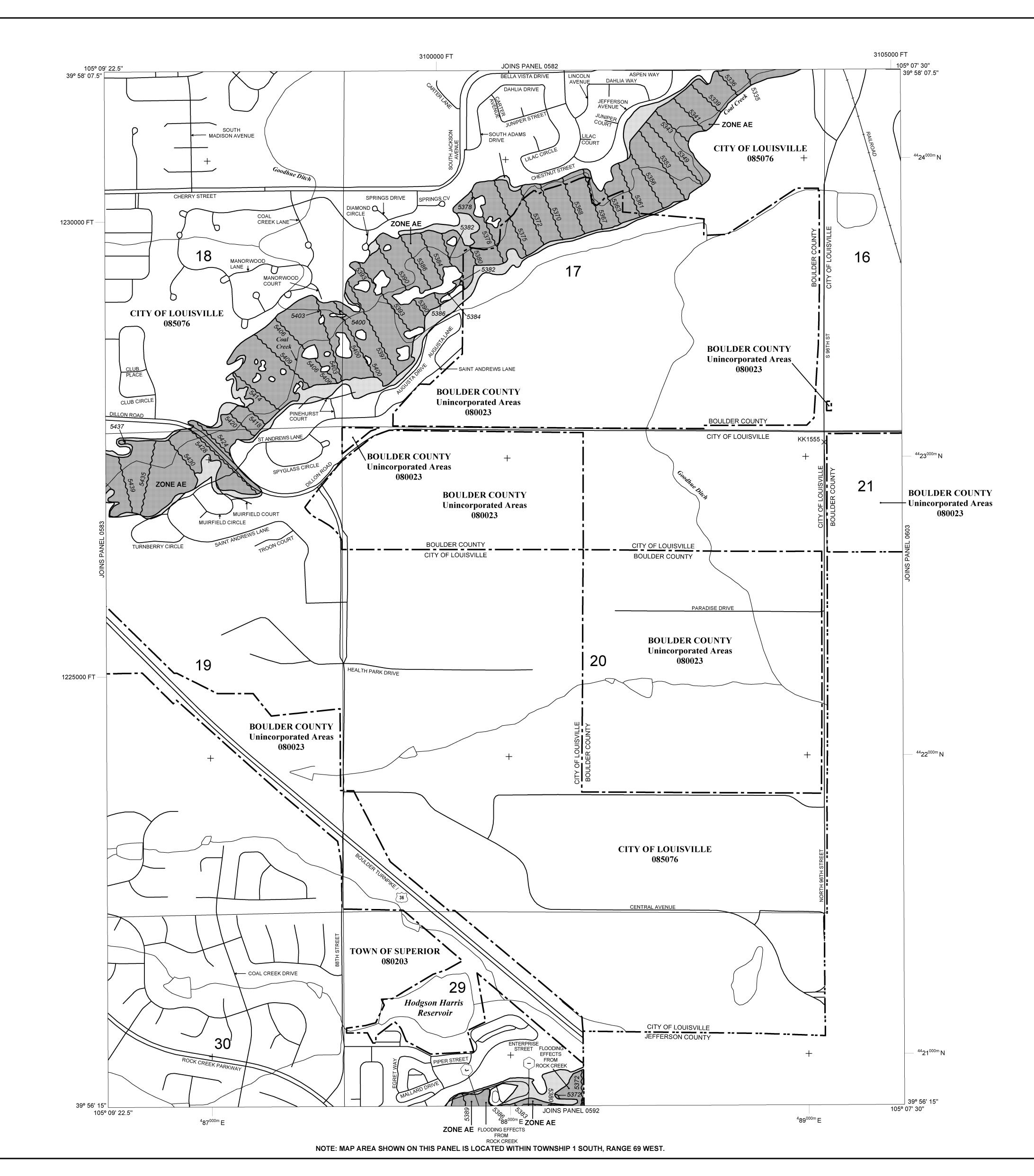


This digital Flood Insurance Rate map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner



Additional Flood Hazard Information and resources are available from local communities, the Colorado Water





LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

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No Base Flood Elevations determined. **ZONE AE** Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average

depths determined. For areas of alluvial fan flooding, velocities also determined. Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone

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AR indicates that the former flood control system is being restored to provide

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X

ZONE X Areas determined to be outside the 0.2% annual chance floodplain. ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary Floodway boundary Zone D boundary

• • • • • • • • • • • • CBRS and OPA boundary Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

Base Flood Elevation line and value; elevation in feet* ~~~ 513 ~~~

Base Flood Elevation value where uniform within zone; elevation in

*Referenced to the North American Vertical Datum of 1988

23 - - - - - - - - - - - - - - 23 Geographic coordinates referenced to the North American Datum of 45° 02' 08", 93° 02' 12"

1983 (NAD 83) Western Hemisphere 1000-meter Universal Transverse Mercator grid values, zone 13

3180000 FT 5000-foot ticks: Colorado State Plane North Zone (FIPS Zone 0501), Lambert Conformal Conic projection

Bench mark (see explanation in Notes to Users section of this FIRM DX5510 × • M1.5 River Mile

MAP REPOSITORY Refer to listing of Map Repositories on Map Index EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

June 2, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL May 6, 1996 - to incorporate previously issued Letters of Map Revision; to add roads and road names; and to update corporate limits. October 4, 2002 - to change base flood elevations; to change special flood hazard areas; to change zone designations; to update roads and road names; to reflect updated topographic information; to incorporate previously issued Letters of Map Revision; and to change floodway.

December 18, 2012 - to update corporate limits; to update roads and road names; to add Special Flood Hazard Areas previously shown on Town of Erie, Colorado Flood Insurance Rate Map dated December 2, 2004; and to incorporate previously issued Letters of Map Revision.

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To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



PANEL 0584J

FIRM FLOOD INSURANCE RATE MAP BOULDER COUNTY, COLORADO

AND INCORPORATED AREAS

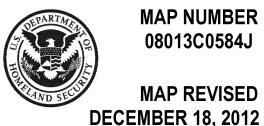
PANEL 584 OF 615

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

NUMBER PANEL BOULDER COUNTY 080023 0584 LOUISVILLE, CITY OF 085076 0584 SUPERIOR, TOWN OF 080203

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject



08013C0584J MAP REVISED

MAP NUMBER

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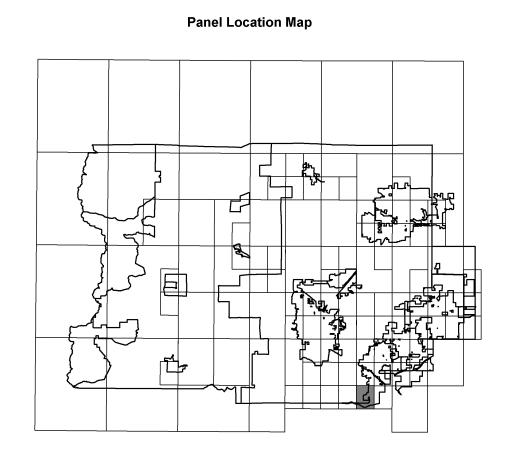
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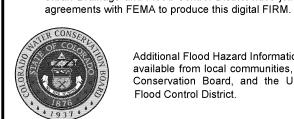
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Boulder County Vertical Datum Offset Table Vertical Datum Vertical Datur Flooding Source Rock Creek

Example: To convert Rock Creek elevations to NAVD 88, 3.2 feet were added to the

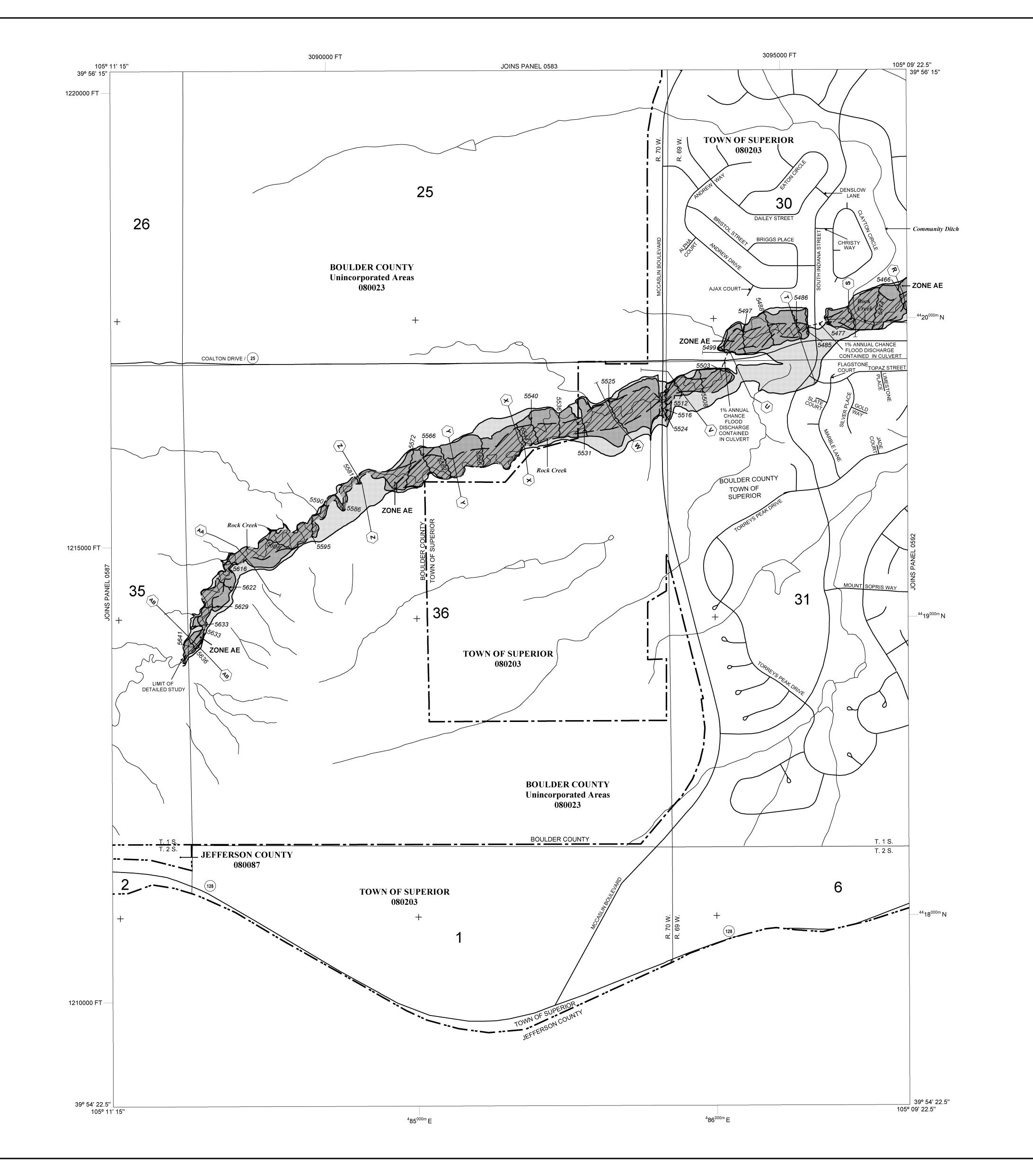


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Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

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OTHER FLOOD AREAS

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Floodplain Boundary Floodway boundary

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CBRS and OPA boundary Boundary dividing Special Flood Hazard Areas of different Base

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Flood Elevations, flood depths or flood velocities.

Base Flood Elevation value where uniform within zone; elevation in

23 - - - - - - - - 23

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Geographic coordinates referenced to the North American Datum of 45° 02' 08", 93° 02' 12" 1983 (NAD 83) Western Hemisphere

1000-meter Universal Transverse Mercator grid values, zone 13 3180000 FT 5000-foot ticks: Colorado State Plane North Zone (FIPS Zone 0501),

Lambert Conformal Conic projection DX5510 × Bench mark (see explanation in Notes to Users section of this FIRM

> River Mile MAP REPOSITORY Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP June 2, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL May 6, 1996 - to incorporate previously issued Letters of Map Revision; to add roads and road names; and to update corporate limits. October 4, 2002 - to change base flood elevations; to change special flood hazard areas; to change zone designations; to update roads and road names; to reflect updated topographic information; to incorporate previously issued Letters of Map Revision; and to change floodway December 18, 2012 - to update corporate limits; to update roads and road names; to add

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the National Flood Insurance Program at 1-800-638-6620. **MAP SCALE 1" = 500'**

PANEL 0591J FIRM FLOOD INSURANCE RATE MAP **BOULDER COUNTY,** COLORADO AND INCORPORATED AREAS PANEL 591 OF 615 (SEE MAP INDEX FOR FIRM PANEL LAYOUT) NUMBER PANEL SUFFIX

BOULDER COUNTY

SUPERIOR, TOWN OF

080023 0591

080203 0591

Notice to User: The **Map Number** shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject



MAP REVISED **DECEMBER 18, 2012**

MAP NUMBER

08013C0591J

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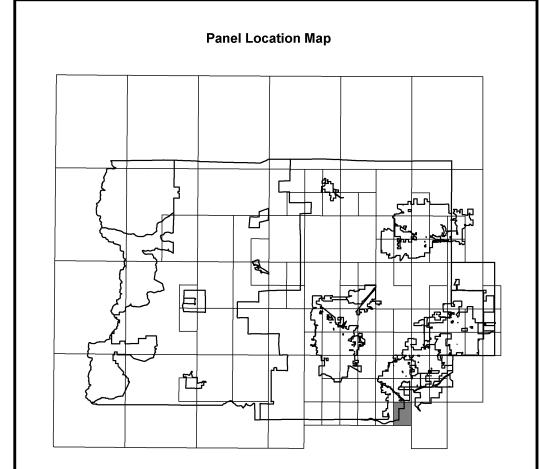
Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community

For information on available products associated with this FIRM visit the Map Service Center (MSC) website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

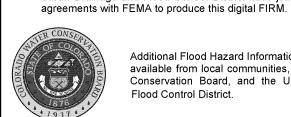
If you have questions about this map, how to order products, or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

Boulder County Vertical Datum Offset Table Vertical Datum Flooding Source Flooding Source Offset (ft) Rock Creek

Example: To convert Rock Creek elevations to NAVD 88, 3.2 feet were added to the NGVD 29 elevations.

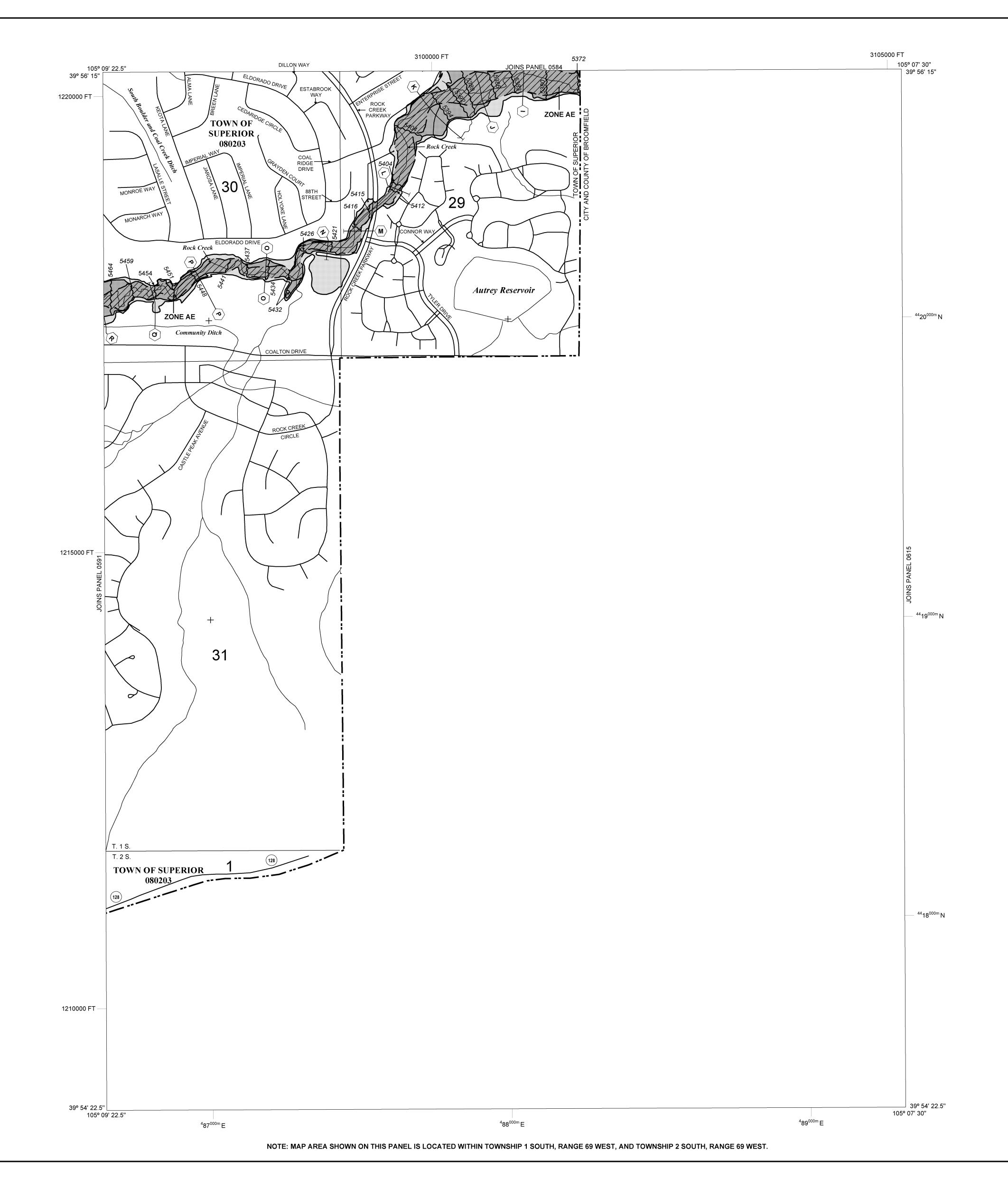


This digital Flood Insurance Rate map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner



Additional Flood Hazard Information and resources are available from local communities, the Colorado Water





LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

No Base Flood Elevations determined. ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations

Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined. Special Flood Hazard Areas formerly protected from the 1% annual chance

> AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

flood by a flood control system that was subsequently decertified. Zone

Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined. Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of

encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible. COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas. Floodplain Boundary

Floodway boundary Zone D boundary

• • • • • • • • • • • • CBRS and OPA boundary

> Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

Base Flood Elevation line and value; elevation in feet*

Base Flood Elevation value where uniform within zone; elevation in

*Referenced to the North American Vertical Datum of 1988

23 - - - - - - - - - - - - - - - 23

Geographic coordinates referenced to the North American Datum of 45° 02' 08", 93° 02' 12"

1983 (NAD 83) Western Hemisphere 1000-meter Universal Transverse Mercator grid values, zone 13

3180000 FT 5000-foot ticks: Colorado State Plane North Zone (FIPS Zone 0501),

Lambert Conformal Conic projection DX5510 🗙 Bench mark (see explanation in Notes to Users section of this FIRM

•M1.5 River Mile

MAP REPOSITORY Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

June 2, 1995 EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL May 6, 1996 - to incorporate previously issued Letters of Map Revision; to add roads and road

names; and to update corporate limits. October 4, 2002 - to change base flood elevations; to change special flood hazard areas; to change zone designations; to update roads and road names; to reflect updated topographic information; to incorporate previously issued Letters of Map Revision; and to change floodway. December 18, 2012 - to update corporate limits; to update roads and road names; to add Special Flood Hazard Areas previously shown on Town of Erie, Colorado Flood Insurance Rate

For community map revision history prior to countywide mapping, refer to the Community

Map History table located in the Flood Insurance Study report for this jurisdiction.

Map dated December 2, 2004; and to incorporate previously issued Letters of Map Revision.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

PANEL 0592J FIRM

COLORADO AND INCORPORATED AREAS

BOULDER COUNTY,

FLOOD INSURANCE RATE MAP

PANEL 592 OF 615

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

SUPERIOR, TOWN OF

080203 0592

NUMBER PANEL SUFFIX

Notice to User: The **Map Number** shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject



MAP REVISED DECEMBER 18, 2012

MAP NUMBER

08013C0592J